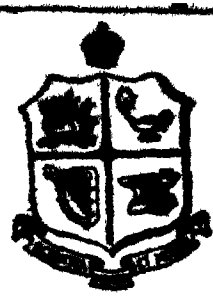

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A HANDBOOK TO INDIA AND PAKISTAN BURMA AND CEYLON

A HANDBOOK TO INDIA AND PAKISTAN BURMA AND CEYLON

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CURRENCY

One rupee 16 annas (1s 6d), 1 lakh 100,000 rs (£7500) crore 100 lakhs (£750 000).

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¼ RUPEE—four annas
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4 ANNAS
1 ANNA

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A HANDBOOK FOR TRAVELLERS IN INDIA AND PAKISTAN BURMA AND CEYLON

INCLUDING THE PORTUGUESE AND FRENCH POSSESSIONS AND THE INDIAN STATES

India and the Golden Chersonese
And utmost Indian Isle Taprobane,
Dusk faces with white silken turbans wreathed
—MILTON, *Par. Reg.*, IV 74-76

SIXTEENTH EDITION

WITH NUMEROUS MAPS AND PLANS

LONDON
JOHN MURRAY, ALBEMARLE STREET
1949

THE FOLLOWING ABBREVIATIONS ARE USED IN THIS BOOK

A.H....	Year of Hijra (the Hegira)
Angl.	*Anglican*
As...	*Annas*
Bapt	Baptist
B.E.....	Bengal Engineers.
B.I.S.N.	British India Steam Navigation Co
Bo E	Bombay Engineers
Cants.	*Cantonments*
C. of S.	Church of Scotland
C.H...	Circuit House
C.M.S	Church Missionary Society
D.B...	Dak Bungalow, a rest-house for travellers
D.B.K	With Messman
dt.	District
E.I Company	East India Company
ft.....	Feet
G.T.Road	Grand Trunk Road
in,...	Inch
H	Hotel
Jn	Junction
m	Mile.
M.E	Madras Engineers
Meth	Methodist
N.W.F	North-West Frontier
p	Page
P. & O....	Peninsular and Oriental Steam Navigation Co.
pop.	Population
Presb	Presbyterian
R.	Refreshment Room
R.C.	Roman Catholic.
R.H	Rest-house.
R.R	Retiring Rooms
Rs	Rupees
rly	Railway
stn	Station.
(S) Suitable	Motor-services
U.P	United Provinces
Wes	Wesleyan.
yds.	Yards.
B.A.R	Bengal-Assam Railway.
B.B. & C.I	Bombay, Baroda, and Central India Railway
B.N.R	Bengal Nagpur Railway.
B.N.W.R	Bengal and North-Western Railway
E.I.R	East Indian Railway.
G.I.P.R	Great Indian Peninsular Railway
M. & S.M	Madras and Southern Mahratta Railway.
N.W.R	North-Western Railway
R.K.R	Rohilkhand Kumaun Railway
S.I.R	South Indian Railway.

*. This sign in the text appended to a name indicates a centre for excursions.

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PREFACE TO THE SIXTEENTH EDITION

THE *Handbook for Travellers in India* was originally published by Mr John Murray in three volumes for the Bombay, Madras and Bengal Presidencies The first of these parts appeared in 1859, the Bengal volume not till 1882 The fourth volume dealing with the Punjab and North-West India was added in 1883. They were prepared by Captain E. B Eastwick, M.P., who made long visits to India in the fifties, sixties, and seventies of the nineteenth century in order to collect the material for them on the spot

These volumes were revised and brought up to date on several occasions, and in 1892 the Handbook was issued in a single volume. The description of Ceylon was written by Sir Arthur Gordon, G C.M G. (afterwards Lord Stanmore) , and the whole Handbook passed through the hands of Sir George W. Forrest, C.I.E., then Keeper of Records to the Government of India. A second edition of the consolidated Handbook was published in 1894.

The third edition was issued in 1898, the general revision being undertaken by Mr Norwood Young The next, the fourth edition, which was a reprint of the third, brought up to date, was prepared in 1901 by Dr Burgess, C I.E. The fifth was a thorough revision, undertaken by Mr Herbert C. Fanshawe, C S I., in 1904 , and in that the Ceylon part was revised by Mr C. G. Ryan. The sixth, which was a reprint of the fifth, brought up to date, was also undertaken by Mr Fanshawe in 1907 The seventh in 1908 was undertaken by the same editor, and was mainly a reprint of the fifth. The sections on Burma and Ceylon were finally revised with the assistance of Mr G. E. Marindin and Mr C. G Ryan.

The next general revision was made in the eighth edition of 1911 by Mr Fanshawe. By 1913 another edition was called for, and a complete revision in the ninth was made by Mr Charles E.

Buckland, C.I.E. The tenth edition of 1919, which was likewise a general revision, was also prepared by Mr Buckland; but it suffered from the disabilities arising from the Great War. In 1920 a reprint of the 1919 edition was issued, with a few changes necessitated by the lapse of time, the conclusion of the war, and new information received; but it was not considered to be a new edition The revision for the eleventh (1924) and the twelfth (1926) editions was undertaken by Sir John G. Cumming, K.C.I.E., C.S.I.

In the course of these revisions much additional information was added to the Introduction regarding the peoples of India and its former Rulers, its history, religions, architecture, and arts, its physical and economic conditions, its Government and administration. New maps were added from time to time, and improved maps substituted for out-of-date maps. Special attention was given to the increased facilities for motor travel; and the figures for the census of 1921 were incorporated in the eleventh edition.

The thirteenth edition, published in 1929, and the fourteenth, in 1933, were supervised by Sir Evan Cotton, C.I.E. Full particulars of rearrangements and additions made were given in the Prefaces to those editions.

The fifteenth, and this edition, also, have been revised by Colonel Sir Gordon Hearn, C.I.E., D.S.O., Royal Engineers (retired). His career of thirty-two years in India took him into almost every province of India, and into many parts of Burma, on the survey and construction and Government inspection of Railways. He has also visited Ceylon. He was always interested in the history and archaeology of India and also, naturally, in transport.

References in the text assume a knowledge not often available to the tourist. Therefore a section of the Introductory Information has been allotted to an historical outline. The Index, now separated from the Directory, supplements this outline. The Directory gives information as to accommodation and food available, but it is particularly requested that errors and omissions

may be communicated to Mr Murray, on a postcard if desired. Against the smaller places are shown the principal objects of interest in the vicinity, not only as a guide in planning tours but also because motor transport has brought many of them within reach without discomfort. The maps have received particular attention, nearly all being redrawn to incorporate the latest information. Folding maps are placed near the end of the relevant text in order to facilitate reference. The book is useful also as a Gazetteer. A Note on Photography (page xvi) has been rewritten by the Editor, who has had considerable experience.

The spelling followed has been, nearly always, that adopted in the one-millionth scale maps of the Imperial Atlas issued by the Indian Survey Department. This system makes exceptions in favour of the older, though irregular, spelling of certain well-known places. The spelling of the Survey Department, Ceylon, has been followed

No attempt has been made to plan tours, as these must depend on the interest of the individual, but the fifty-one routes, given on pages xiii-xvi, usually coincide with recognised tracks to some extent. Any one of the well-known Agencies will place experience at the disposal of the tourist, work out tours in detail, and most of them use this book

For these two editions the Editor would have been less well-equipped for his task without voluntary co-operation and courteous assistance freely offered. The Government of India, the Provincial Governments, and those of Burma and of Ceylon, the Director-Generals of Archaeology in India and Indian States, gave valuable help through their officers Mr Murray is most grateful, and believes that he has made personal acknowledgment in every instance. Mr Ghulam Yazdani, Director of Archaeology in the service of H.E.H. the Nizam of Hyderabad, read the draft outline of the history and architecture of Ancient India. The Librarian of the India House, Aldwych, the Tours Department of the Royal Automobile Club, representatives of Air Services, Mr Sachhinananda Sinha, Editor, *Hindustan Review*, Patna, these are only some of those who have contributed help in the arduous

task of revision. Suggestions received from various correspondents have been utilised, and the Editor trusts that similar help will be again afforded.

Mr Murray desires to associate himself with the Editor in according his best thanks to all whom the latter has mentioned for the great help with which they have favoured him. To many visitors to the East, friends and travellers, from whom he has received valuable aid, Mr Murray desires to express his gratification at the very kind reception accorded by them to the usefulness and completeness of the Handbook in the past.

It is impossible, amidst such a multiplicity of detail, to ensure perfection The Publisher therefore hopes that the indulgent traveller will kindly point out any inaccuracies with a view to their correction on the first opportunity Communications may be addressed to Mr Murray, 50 Albemarle Street, London, W 1.

October 1948

Some of the matter will need verification owing to War damage in Burma, and events since 15th August 1947, when revision was already far advanced, and the Railways had not been regrouped

Official Gazetteers have long been out of print and are not likely to be revised for some time The Handbook can confidently be recommended to supply the information.

This sign in the text appended to a name indicates centres at which to stay.

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PHOTOGRAPHY IN INDIA

ONE CAMERA is admitted free of duty if shipped as part of a passenger's luggage and declared. The "Compass" camera has an exposure meter built in. A cine-camera is useful for animated scenes in bazars or at festivals. For architectural work a stand camera with tilting back and rising front is necessary. This involves a lens of good covering power, and in any event one of large aperture is required. The stronger the light the deeper the shadow, lengthening the time of exposure greatly if detail is desired. The meter should be exposed in the shade. In caves, and for ceilings of apparently well-lit buildings, a magnesium powder flash-lamp will be an assistance. Plates and films, rolled or in film packs, should be developed as soon after exposure as possible. The necessary over-exposure demands control by bromide of potassium in development, and a warning should be given to this effect when entrusting the work to others. Precautions against "fogging" or halation should be taken, and a colour screen is advisable in many cases with panchromatic plates or films. Films are easier to procure.

INTRODUCTORY INFORMATION

(1) GENERAL HINTS

Season for Visit

The season for a pleasant visit to the plains of India and Burma lies between 15th November and the end of March. In the Punjab these dates can be extended at the risk of encountering very great heat in Sind, Central India, and the Deccan. In October and April the heat is apt to be severe in the Red Sea and at the ports of arrival and departure Up to 15th October and after 10th April the weather at the ports may be trying, much more so than in July, August, and September, when rain cools the atmosphere. In Ceylon, August and September are pleasant months during the S.W. monsoon period, while December, January, and February are pleasant when the N.E. monsoon is blowing in the Bay of Bengal. The best accommodation on the larger and fastest steamers, and especially on the P. & O. boats, is usually booked months ahead—outwards between 15th October and 1st December and homewards for March and April, but all passages are subject to obtaining priority Enquiry should be made of passenger agencies, or at the offices of the steamship companies.[1]

Language

English is spoken at all hotels and railway stations, and in all post and telegraph offices, and the leading shops (European or Indian-owned) have attendants who speak English. Local guides with some knowledge of English are available at all important centres. Visitors will find that educated Indians speak the language exceedingly well. A courteous request for information will meet with a willing response.

Expenses

Hotel charges in the Presidency towns and Delhi during the cold weather range from Rs.15 to Rs.25 per day: outside these places they range from Rs.8 to Rs.15. It is customary also to give

[1] Offices of P & O Co (and British India), 14 Cockspur Street, S.W. 1, Orient Line, 7 Bishopsgate, E.C. 2, Bibby Line, 22 Pall Mall, S.W. 1; Messageries Maritimes, 109 Jermyn St, S.W. 1, and 72 Fenchurch Street, E.C. 3 Offices of Thomas Cook & Son, Berkeley Street, Piccadilly, W. 1, and branches, Grindlays, 54 Parliament Street, S.W. 1, Cox & King, 10 Haymarket, S.W. 1, American Express Company, 6 Haymarket, S.W. 1

a gratuity to servants, including the water-carrier (*bhisti*), if any, and the sweeper, except in some hotels where a charge is added. As walking in the heat of the day is better avoided, taxis or cars have to be used generally in order to visit the objects of interest. The mileage charge for trips is 8 annas a mile At private houses it is usual to give a present to the head servant on behalf of all the attendants. The railway charges are usually 2 annas per mile for 1st class on Indian Railways, 5 or 4 pie on 3rd class. Distances being great, the fares may amount to considerable sums, and the tour requires planning. As elsewhere in the world, the traveller will have to supply himself constantly with a sufficiency of small change.

Taxis cost about 8 annas a mile, horsed carriages, Rs.1 and upwards for an hour, but for shopping or sightseeing there are pony tongas at a reasonable rate if not quite so comfortable

MOTORING

The use of motor-cars is very general in India and Ceylon, and the roads in all large places and the main roads connecting these will ordinarily be found good, although large rivers on some routes are not bridged. Expeditions to places of interest can be carried out in motors at a reasonable rate. It is advisable to have a second car for servants and baggage, also in case of a breakdown.

The *Bombay Presidency Motor Guide*, the *Western India Automobile Association Handbook and Motor Guide*, the *Automobile Association, Bengal, Motor Guide and Handbook* (for North-East India), are all full of useful information There are the following Automobile Associations, the Secretaries of which will gladly give any information possible to visitors (1) Western India A.A., 8 Queen's Road, Bombay, (2) A.A. of Bengal, 40 Chowringhi, Calcutta; (3) South Indian A.A, P.O. Box 325, Mount Road, Madras, (4) Motorists' Association, Ranchi; (5) Burma Motor Association, 104 Strand Road, Rangoon; (6) Northern India A A., Mela Ram Buildings, Charing Cross, Lahore, (7) Ceylon Automobile Club, Chamber of Commerce Buildings, Colombo; (8) United Provinces A A, 32 Canning Road, Allahabad Members of the Automobile Association, London, will receive advice and assistance from—The Manager, Motor Union Insurance Company, Esplanade Road, Bombay; and the Manager, Motor Union Insurance Company, 101 Clive Street, Calcutta.

There is a Customs duty *ad valorem* for new cars; used cars are assessed by length of time in use: if the car is re-exported within two years, a refund is returnable. A car should be registered with a new number, and a driving licence obtained without delay at the Chief Police Station of the Port of arrival. In addition to fees for registration and driving, a local tax has to be paid before a car can be used. The location

of garages and petrol stores should be carefully noted. Petrol is available at all the principal towns.

Maps on various scales (the 50 miles to the inch Road Map is convenient, 1939) are available from the Map Record and Issue Office, Survey of India, Calcutta, but it is best to obtain local advice.

The main roads are, as a rule, excellent from December to March. In order to cross unbridged rivers which are passable by fords and ferries, a car with a good clearance is a desideratum. Sun hats and smoked glasses are essential even in the cold weather. The same hints regarding bedding, supplies, and Indian servants apply, of course, to motor travelling as to travelling by rail in India.

Bombay.—For landing and getting ready for the road, Rs 100 should be allowed. Bombay is the best place to land for a tour through Northern India, as the roads are good, and arrangements for petrol, etc, are easily made. Shipping Agencies in London are quite competent to arrange for landing, otherwise the Automobile Company, Queen's Road, will arrange to land and prepare cars so that all may be ready when the owner arrives The Company should be addressed well in advance, and given the particulars of the proposed tour, and they will make all arrangements for supplies of petrol, etc. etc, *en route*

Calcutta.—Landing, etc, and duty as above The Russa Engineering Works, Mission Row, or G. Mackenzie & Co, 208 Lower Circular Road, will land cars and make all the necessary arrangements.

Karachi.—In the absence of roads the car will have to be railed part of the way, unless permission is obtained to use canal banks.

Climate and Clothing

For the voyage *a suit or two of tropical clothing for the Red Sea* is required; otherwise ordinary English clothing, winter and summer, will suffice Temperature is dependent on latitude and altitude, season and time of day

The stewards' clothing will give a warning of what is to be expected. In the Red Sea a man will find it convenient to have a very thin suit of tweed or grey flannel, or of silk or "Palm Beach" material, or drill, for day and a thin Alpaca dress jacket for dinner. (It is customary to dress for dinner on British mail steamers.) A lady will need dresses of washable material for daily wear and one or two light evening dresses. It is, however, a mistake to think that very little clothing tends to coolness. A coat or wrap should be kept handy. A fancy-dress dance usually is arranged, but an Oriental dress is undesirable. White shoes with rubber soles are best for deck wear by men, and ladies will find them useful for deck games.

A careful distribution of articles needed for different parts of the voyage should be made, the baggage being labelled "cabin," "wanted on voyage," and "not wanted on voyage," as the case may be. The "wanted on voyage" luggage should contain sufficient underwear and clothing for slightly longer than the whole voyage—otherwise the passenger may be inconvenienced on arrival A bag, with a lock, for soiled linen should not be omitted, and a cabin "companion" for holding toilet articles will be found useful. On the best steamers there are frequent "baggage days," when passengers can have access to articles labelled "wanted on voyage" and re-stock a suit-case. On some ships there is a laundry.

A good and strong deck chair is essential to comfort and is sometimes available on board the long cane chairs are more comfortable than the ordinary folding canvas chair, but are unwieldy, and may be damaged in stacking A cushion will be useful, if looked after, on the voyage and for railway travelling

For a winter tour in the plains of North and Central India generally, and in Upper Burma, a man must take a warm winter overcoat or travelling ulster for night journeys or the early morning A lady, besides a light warm coat or "sports" coat, should have a loose warm wrap-coat to wear on long drives before the sun rises or after it sets, and a dressing-gown for night journeys by rail, a dust-cloak is also useful. While the midday is always warm, sometimes hot, the evening dews may be so heavy as to wet the outer garment. Also, the cold of the nights and mornings is often very sharp, so that the secret of dressing is to begin the day in things that can be thrown off as the heat increases, and can be resumed as the cold returns In some places in North India in the winter months the temperature will fall between 40° to 50° within the two hours on either side of sunset, and the risks of serious chills are very great It has often been said with truth that more illness is contracted from chills in India than from the heat Cellular underclothing, especially linen, is a great safeguard, but the traveller should become accustomed to it beforehand. Real winter clothing will be necessary if it is intended to visit any hill-station Woollen sleeping-garments, and a flannel "kamarband" (a belt of flannel 8 in to 12 in. wide, round the waist with tapes over the shoulders), are strongly recommended for wear at all times.

Throughout the **South**[1] **of the peninsula**, and at most times in Bombay and Calcutta, thin or tropical clothing is required. Silk or cotton suits for men, and very thin dresses for ladies, as also khaki riding- and shooting-suits, can be got cheaper and better in India than in England, and a local tailor will make a satisfactory suit from an English pattern, of which one or two should be taken.

[1] This may be taken as applying to all places South of Hyderabad, in the Deccan, *excluding* the higher plateau of Mysore.

Arrangements for washing clothes, usually charged by the piece, can be made at most halting places.

The hospitality of India involves a considerable amount of dining out, and therefore a lady should be provided with several evening dresses. A supply of visiting cards should be taken, especially if visiting Indian states. For camp, or long expeditions by road, riding-breeches and gaiters for men, and riding-suits for ladies, should not be forgotten.

A good sun-hat is an essential and should be bought before arrival. It should have a brim that will protect the temples and back of the neck, at the top of the spine, and should be well ventilated all round Many London hatters have a large choice of sun-hats and helmets, for ladies as well as men; and travellers should be careful to wear such head protection whenever they are exposed to the sun during the latter part of the voyage. Gurkha felt hats are now considered sufficient, but for shooting or camping it is desirable to purchase in India a larger pith hat, such as the Cawnpore Tent Club helmet A lady will find that a felt hat gives more protection A sun umbrella (which should not be too thin) should not be forgotten. Every traveller should also be provided with sunglasses, for which Crooke's glass is recommended

A traveller in **Ceylon** will seldom require any but the lightest of clothing, except in the mountains, where the temperature becomes cooler as he ascends At Kandy a light overcoat, and at Nuwara Eliya warm wraps and underclothing are necessary

Bedding

Every traveller must, on or before arrival in India, provide himself with bedding, to be taken with him everywhere The minimum equipment is a pillow, a good *razai* (cotton-wadded quilt) and a couple of warm blankets, or, still better, an eider-down, with pillow-cases, cheap cotton sheets, and a light blanket These can be packed conveniently in an ordinary holdall secured by straps A waterproof sheet is a useful addition, but cannot be called an absolute necessity. A complete equipment can be purchased. Soap and towels are necessities.

Travelling Servants

A travelling servant who can speak English is almost indispensable, but should not be engaged except on the recommendation of a trustworthy Agent, such as Cox and King's, Thomas Cook & Son, or American Express Coy. He may be exchanged at Delhi or Calcutta if ill or unsatisfactory. Such a servant is necessary to wait on his master in hotel bedrooms, and will be found very useful in a hundred different ways when travelling and as an interpreter. Having ascertained beforehand the fair wages which such a servant ought to be paid

(plus food allowance), the master should come to a definite arrangement with him before engaging him or advancing any salary; and it is advisable to have an agreement with him in writing. Clothing may be required and should be conceded, because the comfort of the master will be affected by illness of the servant, but the outfit should be inspected to ensure its provision. Medical treatment should not be grudged. A settlement of all expenses incurred should be made at least weekly.

Friends "up country" may engage a servant and send him to the port of arrival. "Up-country" servants are often cheaper and more trustworthy, but their knowledge of English is not generally very good, and they are unhappy if far from home. Ladies may travel with an accredited man-servant without hesitation, and will find him far more useful than an *áyáh* in almost all respects. The services of a good *áyáh* are more difficult to secure than those of a bearer servant, and naturally are more expensive. The best *áyáhs* with a knowledge of English come from Madras. During the first two or three days of his service it should be carefully explained to the travelling servant exactly what he is expected to do, and it will usually be found that he will thereafter do this satisfactorily. If the servant proves satisfactory, it is the custom, when giving him a certificate, to make him a parting present.

Tours

No attempt has been made to indicate tours in India, Burma or Ceylon, as these must depend so much upon the tastes and interests of individuals. The list of routes given on pp. xxii-xvi will, it is believed, enable travellers readily to decide for themselves, and details (fully worked out, if desired) can be obtained from Messrs Thomas Cook & Son, who have Eastern branch offices at Bombay, Calcutta, Delhi, Rangoon and Colombo, or from other Agencies, or from the Publicity officers of Main Railways. Tours in the South provide plenty of interest, and are cheaper, while the climate and scenery leave nothing to be desired, but not more than two buildings of the same type need be included by the ordinary tourist.

Railways

Each railway system publishes its own time-table, and many railways have excellent illustrated guides. Newman's *Indian Bradshaw*, with maps, railway routes in India, and general information of inland steamer routes, is convenient for general purposes, and desirable, as the times of trains are liable to alteration. Trains are numbered and hours counted from midnight up to 24, as in France: thus 20.12 is 8.12 P.M., and so on. Railway time throughout India

and Ceylon is standard time, which is 5½ hours in advance of Greenwich time.

The difference with regard to the local times (if kept) should be borne in mind. Standard time is 39 minutes in advance of Bombay, 9 minutes in advance of Madras, 2 minutes in advance of Allahabad, 21 minutes in advance of Delhi, 62 minutes in advance of Karachi, and 33 minutes in advance of Lahore. It is 24 minutes behind Calcutta, and 37 minutes behind Chittagong.

In Burma standard time is 6½ hours in advance of Greenwich, or 5 minutes in advance of Rangoon time. Colombo time is 5½ hours in advance of Greenwich.

At many of the larger towns there are two or more stations Where there are both, the traveller should, as a rule, book, not to the "City," but to the "Cantonment" station, but before booking he should note which station is mentioned in this *Handbook*. The Indian Railways consider the comfort of all classes of travellers. In the 1st and 2nd class compartments the seats, which are wide, are so arranged as to form couches at night, but bedding and pillows are not furnished. Each compartment is provided with a lavatory, and sometimes a shower: a coupé is convenient for married couples. At all terminal stations, and at various large roadside stations, berths in the carriages can be booked beforehand. It will generally be found convenient to send a servant ahead to the station with the luggage, so that he may book it, if tickets have not been taken beforehand, a slip with the destination of the traveller written on it should be given to the servant to obviate mistakes. The payment of coolies (porters) is best left to a servant.

Special tourist cars, including kitchen and servants' accommodation, are available for parties on the principal railways If a party can be made up, this method of travel will be found very convenient and even cheaper, if the cost of hotels, excess luggage, and carriages be considered, estimates from any Railway Publicity Officer.

Travellers intending to use refreshment rooms should signify their intention to the guard of the train beforehand, and he will telegraph (free of charge) to the station indicated, in South India and Burma tickets for meals are purchased at the same time as the railway ticket. Mail trains usually carry ice and aerated waters for sale. Restaurant cars are run on most of the express mail trains, and air-conditioned coaches on a few.

The Station-masters are particularly civil and obliging, and will, where possible, arrange for ponies or conveyances at out-of-the-way stations, if notice is given them beforehand; they will also receive letters addressed to their care, which may be a convenience to travellers.

Heavy baggage must be registered and should be kept to a minimum · usual free allowance, 120 lb. 1st class, 60 lb. 2nd class

Handling is not rough, and leather or wardrobe trunks only involve unnecessary expense. Travellers must be careful to see that their heavy luggage is booked to proceed by the same route as themselves; all small articles in the carriages should be carefully placed out of the reach of possible thieves and the gauze shutters should be lowered and bolted at night. When travellers leave their carriages in order to go for meals to the dining-car or the refreshment rooms, a servant or a station coolie, to be distinguished by a badge or armlet, should be placed formally in charge of the traveller's property For a small sum the coolie can be trusted to guard it

Hotels, Dak Bungalows, and Rest-houses

Except at some centres, there are hardly any hotels in India which come up to European standards, but many are quite comfortable. As they are often crowded in the tourist season the traveller should give notice beforehand Some of the European Clubs admit recommended visitors, or members of affiliated Clubs, as honorary members, but it is seldom that such accommodation is available in the cold weather, unless it is arranged for by a friend beforehand All property should be kept carefully locked in hotels.

At the Dak Bungalows (Travellers' Rest-houses established by Government in all important places) the keeper in charge (commonly called the *khánsáma*) will provide meals, but it is well to give notice of an intended arrival The bedrooms in these bungalows have an adjoining bathroom and are usually sufficiently, if roughly, provided with furniture and lights They cannot be retained beforehand—the first comer having the preference; and after occupying a room for twenty-four hours the traveller must give place, if required, to the next comer There is a fixed fee for the occupation, and usually for each of the simple meals to be supplied. In some cases the *khánsáma* is a good cook In small and out-of-the-way places it is best to take supplies—such as tinned soups and vegetables, tinned butter and milk, tea and sugar, and to arrange for aerated water from a good source by train.

The information in the Text or Directory should be verified (as stated at the beginning) because dak bungalows may be converted to other uses, or the *khánsáma* withdrawn

There are many places well worth visiting, though somewhat off the beaten track, where some kind of Rest-house is available, but no food; or an official Inspection Bungalow is available by special permission beforehand (it is not always obtainable), and usually servants and food have to be taken. Details are given in the body of the text. At some railway stations retiring-rooms for travellers are provided, or waiting-rooms can be utilised in emergent cases, though the Railway Companies discourage the public from using them

as Dak Bungalows. Before organising trips to less-frequented localities inquiries should be made, and the traveller should be provided against emergencies. In villages it is generally possible to obtain such supplies as eggs, fowls, milk, and the local grain through the station-master or village head-man, but the people will not lend their drinking or other vessels to Europeans. Village milk or water should NEVER be drunk until it has been thoroughly boiled, preferably under supervision

The Rest-house of Ceylon is more like an hotel than the Dak Bungalow in India, in that it is more frequently furnished with bedding and linen, and food is generally available

Food

The traveller will, of course, realise that the quality of meat, fowls and eggs is not always up to the standard of a more temperate climate, but the food is nutritious The sea fish is excellent, and is sent long distances in ice, and the river fish is generally fresh ; but it does not always agree with persons new to the country, and not even in the case of the *mahsir* or *pala* does it always commend itself as palatable. Game is generally abundant in the cold weather—quail (early and late in the season), snipe, teal, duck, partridge, and sandgrouse Raw fruit is better avoided at dinner-time Aerated water should be drunk, and may be used for the mouth toilet in the train ; and the source of all water should be ascertained. If the traveller leaves the beaten track, he should have a tiffin (luncheon) basket, containing knives, forks, and other simple fittings ; and a basket of supplies and aerated water (to be obtained only from proper manufacturers, not from itinerant vendors at railway stations). A Primus stove will be found a great convenience Tea is probably safe, but the milk, tinned or bottled, from some safe source of supply, should be carried Ice in an ice-box, with sawdust, or wrapped in a blanket, should be taken in the hot weather

Health

There is no need to apprehend great danger, if moderation is practised It is usual to avoid heavy beer or spirits until the late afternoon. Maintenance of good general health will combat indispositions, and damp underclothing should always be changed as soon as possible. The necessity of using warm overcoats or pullovers early or late in the day has been mentioned. Excessive bodily exertion and consequent fatigue should be avoided by all who are no longer young.

To deter malarial mosquitos, all bare skin must be covered before

sunset, and a vanishing cream rubbed on face and hands hourly before retiring under a curtain. Mepacrine is a prophylactic or remedy for malaria—D.D.T. is a (temporary) insecticide, and di-methyl-phthalate may be sprayed on veils or open-mesh sleeves. Inoculation against enteric fever (plague is endemic) is very advisable before or on the voyage. Avoidance of fatigue is necessary upon the occurrence of any indisposition, and only light food should be taken until it passes away. A small medicine case can be obtained from a chemist at the port of landing, on his advice In cases of fever, or doubtful ailment, no time should be lost in seeking the services of a qualified medical man. There is a Civil Surgeon in all places of any size; private practitioners or medical missionaries are usually to be found only in the large towns. The ordinary fee for attendance is Rs.16, the traditional "gold mohur," but there are perfectly competent assistants in the Indian Medical Service.

Sport

Sporting localities have been incidentally indicated in the routes. It is advisable to join a party under the guidance of one of the organisers of such tours. Firearms are subject to a heavy duty when brought into the country, see p. 6 Large-game shooting, except by special invitation, should not be attempted There are Game Protection Societies.

Small-game shooting—*i e* wild fowl, hare, etc., is not so easy as formerly, since cultivators may object to trespass, and conditions generally have altered Antelope shooting in thickly populated areas is dangerous. Blue birds, pigeons or peacock are sacred to the Hindu The advice and company of local sportsmen should be sought. Near Cantonments the ground is always too much shot over to afford good sport. Ankle-boots and leggings should always be worn, as a defence against poisonous snakes.

Pig-sticking or hog-hunting is an exciting sport which can be watched at the Kadir Cup Meeting in March Hunting may be obtained Racing may decline but Indians enjoy it, and paper-chases at Calcutta are exciting. Golf and tennis can be played at many places Golf clubs can be taken but tennis and squash rackets are better bought in India

Hints for Camping

Travellers who leave the beaten track with the intention of shooting, or for the purpose of visiting remote ruined cities, should consult a firm specialising in camp equipment Transport in the shape of camels, carts, baggage-ponies, or bearers, can usually be got in any district headquarters, and in the larger places cars can be obtained. Those who intend to go into camp (as the Anglo-Indian term runs)

should be experienced, or have friends who will make arrangements for them, and, in any case, a courteous request for assistance made by calling upon the principal English or Indian officer of the place is sure to meet with courteous consideration; but perhaps the following suggestions of requirements may prove of some use. In Kashmir camp equipment can be hired from the Agents there—elsewhere it would have to be purchased.

Tent (Cabul tent, 80 lb complete) for self, and a *pal* tent for servants, possibly one for the kitchen, a few iron tent-pegs (wooden ones for soft ground); and a mallet. Camp-bed, table, chairs, and carpet. Indiarubber flat bath, and a board to stand on, or tubbing can be done by pouring pots of water over the head (fresh pots can be purchased at any village), a screen (*kanát*) to use as a bathroom, a washing-basin (*chilamchi*) and stand, hooks to strap on tent-pole for hanging clothes on, etc, aluminium cooking-pots as required by the cook, a few knives, forks and spoons, aluminium plates, cups and saucers, and mustard, pepper and salt pots. Servants required in camp are a bearer and a cook; a water-carrier (*bhisti*), and a sweeper may be got locally. All food for the traveller, except what he can shoot, must be taken with him. Food for servants, and some meat (goat or sheep or chickens), can be got in any but the poorest villages. For bedding and clothes take blankets, sheets, an Indian shooting-suit, ankle-boots and gaiters, a light flannel suit or two, a large sun-hat and a cap for wear in the evening. A mosquito-net and poles will be needed and should always be used. In some places the sand-fly is a pest and a muslin curtain is necessary. A portable radio set is almost a necessity (see p. cxiii).

If white ants are about, boxes should be raised on stones and carpets should be shifted every morning. The ravages of these and other insects are rapid and extensive. Only teak is immune. Persons not accustomed to camping out should always have straw put on the ground under the tent carpet. Some apparently good camping sites abound in cattle-ticks.

Plenty of cartridges should be taken, since there are formalities in sending them by train. A few ball or expanding bullets should be carried.

For medicine, quinine or mepacrine, some aspirin, some aperient, some chlorodyne, and citronella oil or D.D.T. to avoid mosquito bites which ammonia will relieve. Vinegar will cure wasp or bee stings.

Books

The literature on India is enormous. The National Book Council has issued a list. Books for special subjects or places, and for Burma, Kashmir and Ceylon have been quoted in the body of the Handbook.

(2) AIR ROUTES TO INDIA

Air services, carrying mails and passengers, as at (1947) in operation between London and India.

1. BRITISH OVERSEAS AIRWAYS :

(*a*) Tiger Service (York Speedbird) London Airport to Calcutta in 3½ days, four times weekly, via Malta, Cairo, Basra, Karachi and Delhi (Palam).

(*b*) Dragon Services (Hythe Speedbird) by Flying boat on Saturdays or Wednesdays (Malaya Service) from Poole to Calcutta on the fifth day and to Rangoon. The route is by Marseilles, Augusta, Cairo, Basra, Bahrein and Karachi

Fares to and from Calcutta: single, £140, return, available for one year, £252. These fares include all meals, hotel accommodation, transport and tips throughout the entire journey No further expenses need be incurred by the passenger Each passenger is entitled to a transport of 66 lbs. The carriage of excess baggage is not guaranteed

For further information application should be made to the Airways Terminal, Buckingham Palace Road, London, S.W.1., or branch offices.

2 AIR FRANCE (French). from London to Baghdad, Karachi, Jodhpur, Allahabad, Calcutta, Akyab and Rangoon.

Further information can be obtained from Air France, 52 Haymarket, W 1, or from Messrs Thos Cook & Son, Berkeley Street, London, W 1

3 K.L.M. (Dutch) from London to Amsterdam, Rome, Cairo, Baghdad, Basra, Karachi and Calcutta, 4 days a week

For further information apply to K.L.M., 202-4 Sloane Street, London, S.W 1.

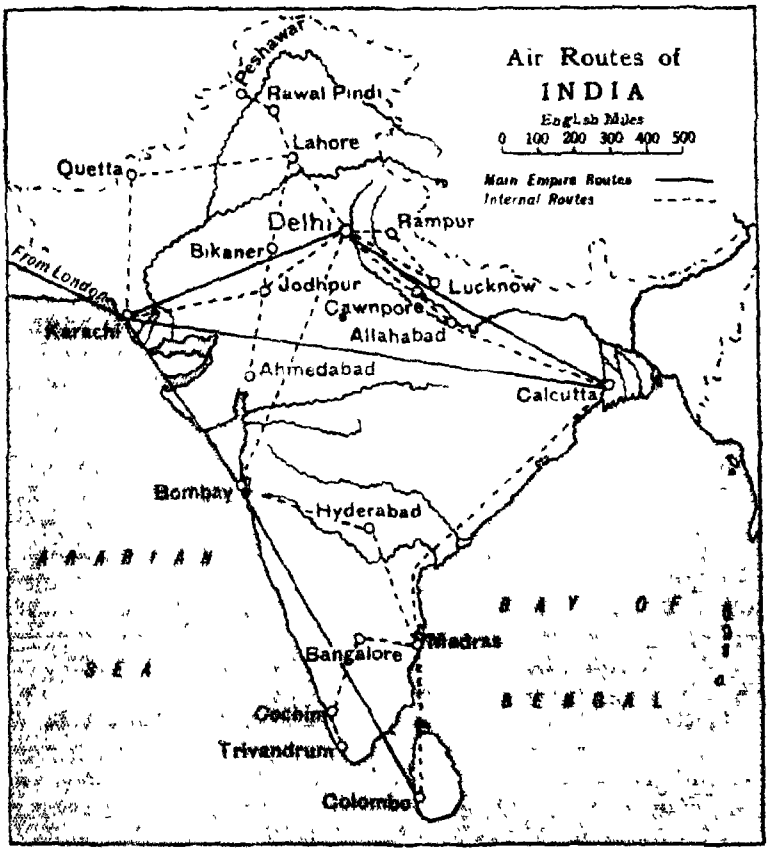
Passports with the necessary visas must be carried on the person by all three routes

Cameras : Restrictions are imposed by certain Governments upon the taking of photographs whether from the air or on the ground.

Internal Services are operated (see Map) in Northern India by Indian National Airways Ltd. (Indiaman) and in South India by Air India Ltd.

(3) VOYAGE FROM ENGLAND TO GIBRALTAR, MARSEILLES, MALTA, PORT SAID, THROUGH THE SUEZ CANAL AND RED SEA TO ADEN AND BOMBAY

The principal steamer Lines running from England to India are the P. & O. and British India Companies from London, and the



Ellerman (City and Hall) Lines from Liverpool to Bombay, Karachi, Colombo, Madras, and Calcutta ; the Anchor Line from Liverpool to Bombay or Karachi ; the Bibby or Henderson Lines from Liverpool to Rangoon ; several lines touch at Colombo Priority must be claimed to obtain an early passage (see footnote to page xvii)

The comfort of the voyage depends much on the choice of the steamer All cabins now have portholes, and possibly the inner ones

keep cooler. A bad sailor should select a central position and a cabin on a lower deck, where the motion will be less.

On going on board it is well to arrange for a seat at table as soon as possible. Seats are usually allotted by the chief steward.

It is usual to distribute 10 per cent. of the single, or 5 per cent of the return, fare among the stewards and bath attendants, etc., the cabin steward receiving the largest share Otherwise the allotment should depend on the amount of call on their services, and the numbers on whom they attend. Stewards are hard worked and should not be summoned in their afternoon rest-time On the steamers of the P. & O. and British India Companies passengers are entitled to medical attendance by the ship's surgeon, at a charge per visit.

The journey can be shortened by taking the train across France to Marseilles and joining a French steamer which starts from there The P. & O. mail steamers start from the Tilbury or King George V Docks, or Tilbury Landing Stage.

Travelling by sea from England, through the Bay of Biscay, results in a saving of a few pounds but it adds a few days to the voyage The first place sighted is generally **Cape la Hague**, or **Hogue**, on the W coast of the Cotentin, in France, off which, on the 19th of May 1692, Admiral Russell, afterwards Earl of Orford, defeated De Tourville, and sunk or burned sixteen French men-of-war, then **Cape Finisterre** (*finis terræ*), a promontory on the W. Coast of Galicia, in Spain, off which Anson defeated the French fleet in 1747 The next land sighted will be, perhaps, **Cape Roca**, near Lisbon, and then **Cape St Vincent**, at the S W. corner of the Portuguese province Algarve, off which Sir G Rodney, on the 16th January 1780, defeated the Spanish fleet, and Sir J. Jervis won his Earldom on the 14th of February 1797, and Nelson the Order of the Bath, after taking the *S. Josef* and the *S. Nicholas*, of 112 guns each. This Cape has a fort upon it, and the white cliffs, 150 feet high, are honeycombed by the waves Just before entering the Straits of Gibraltar, **Cape Trafalgar** [1] will also probably be seen, immortalised by Nelson's victory of the 21st of October 1805

Tangier—Ibn Batuta, an historian, who visited India between 1333-42, was a native. The Portuguese occupied it in 1474 and, with Bombay, Tangier was part of the dowry of Katherine of Braganza, married to Charles II of England in 1661. The English took possession in 1662 and the Royal Dragoons were then raised as the Tangier Regiment. The place was held against constant Moorish attack, and a siege in 1680, when the garrison was commanded by Mordaunt (Earl of Monmouth in 1689). In 1684 Tangier was abandoned to the Moors by Lord Dartmouth, accompanied by Samuel Pepys. Kirke was the last Governor with his "Lambs," bearing the crest of the House of Braganza, raised 1682. In 1925 it was administered by an International Com-

[1] Tarf-al gharb, the site of the West

mission. Spain occupied it in 1949. Tarifa (Jebel Musa) is passed, and Gibraltar comes in sight.

TABLE OF DISTANCES BETWEEN THE VARIOUS PORTS ACCORDING TO THE ROUTES TAKEN BY THE STEAMERS OF THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY

	London (*if via Plymouth add* 50)									
	295	Plymouth								
	1309	1054	Gibraltar							
	2003	1748	694	Marseilles						
	2290	2035	981	641	Malta					
Viâ Malta	*Viâ Marseilles*									
3225	3511	3256	2202	1508	935	Port Said				
4620	4906	4651	3597	2903	2330	1395	Aden			
6284	6570	6315	5261	1567	3994	3030	1664	Bombay		
6713	6999	6744	5690	4996	4123	3488	2093	875	Colombo	
7973	8259	8004	6950	6256	5683	4748	3353	2135	1260	Calcutta

GIBRALTAR.—As the steamers rarely stop for more than a few hours, passengers will not find time for anything beyond a walk in the town and lower fortifications The place is a good one to buy tobacco, as it has been a free port since the time of Queen Anne. There are steamers frequently to Algeciras (Al-jazira, the peninsula or island), 6 m. across the bay, and the terminus of the Spanish railway to Granada.

Gibraltar was reackoned as one of the Pillars of Hercules, the African pillar being Abyla, near Ceuta, which was taken by Prince Henry the Navigator of Portugal in 1415 It was taken from the Visigoths in A D. 711 by Tarik Ibn Zayad—Jab-al Tarik = Gibraltar—and retaken by Castile, 1309-33, but not finally wrested from the Moors till 1503. In 1704 it was taken by the English with Dutch assistance, and ceded by the Treaty of Utrecht, 1713 It sustained several sharp sieges by the French and Spaniards until 1779, when the memorable siege which lasted four years commenced and ended by the repulse of the combined fleets of France and Spain by the garrison under General Eliott, Lord Heathfield of Gibraltar. In a sentry-box were found the often misquoted lines :

"God and the soldier all men adore
In time of battle and no more.
When war is over and all things righted
God is forgot and the poor old soldier slighted"

Adapted from lines by THOMAS GORDON (1612-85).

It was again ceded by the Treaty of Versailles, 1783. The area of the rock is 1¼ sq. m.

As the steamer rounds Point Carnero, an exposed bay 6 m. wide and 10 m. deep is entered, and a fine view is obtained of the vast rocky promontory, running N. to S., which on the N. face rises in a precipice 1200 ft. high. It is 3 m in length, and from ½ m. to ⅔ m. in breadth; and is joined to the mainland by a low, sandy isthmus, 1½ m. in length. It is steep and rugged, but on the W. there is a slope of from 200 to 300 ft. from the rock down to the sea. There are three peaks—N. is the **Rock Gun,** or **Wolf's Crag,** 1337 ft., in the centre the **Upper Signal Station,** or **El Hacho,** 1255 ft high; and S is **O'Hara's Tower,** 1408 ft. Here the rock descends to **Windmill Hill Flats,** a level plateau ½ m. long, which ends in a still lower plateau from 100 to 50 ft above the sea, called **Europa Flats.** The mole, landing-place, and dockyard occupy the west side from opposite O'Hara's Tower to the Signal Station, and the town lies above them.

West Port Street forms the main thoroughfare of the place from the **Land Port** to the **South Port Gate.** Sketching is strictly prohibited. The hour of evening gun-fire varies according to the time of year; a few minutes later all gates are shut till sunrise, though up to a later fixed hour entrance is permitted with certain police formalities

The Main Street may be followed as far as the **Alameda,** outside the South Port, this was the parade-ground until 1814, when Sir George Don made a lovely garden. It contains a Dragon Tree reputed to be over 1000 years old. A column brought from the ruins of Lepida is surmounted by a bust of the Duke of Wellington, and there is also a bust of General Eliott, the hero of the great siege, 1779-83 Half-way down the street is the **Exchange,** with the **Club House** to the W. The Anglican **Cathedral** Church of the Holy Trinity, built in the Moorish style in 1832, stands near these, and the Governor's residence, which once belonged to Franciscan friars, is "The Convent." The Library was founded in 1804. Outside the South Port Gate is a small cemetery, in which many who died of wounds received at the Battle of Trafalgar are buried; and farther South, below the Alameda, is the dockyard. An upper and a lower road lead from here to the Windmill Hill and Europa Flats. Beyond these, on the East shore, is the summer residence of the Governor, "The Cottage," built by General Fox.

In order to explore the Heights and fortifications of Gibraltar a special order from the Military Authorities is necessary From the Rock Gun there is a fine view of the Ronda Mountains and the Sierra Nevada; the **Moorish Castle** (A.D. 746) is on the way to it, and under a massive tower, called the Torre de Omenaga, are some tanks. Beyond are the wonderful galleries in the North face excavated by convict labour. From the **Signal House** the view includes the Atlas Mountains, Ceuta, and Barbary, ending with the Bay of Tangier, a Morocco seaport. Between the Rock Gun and O'Hara's Tower

live a few apes (only three in 1939), jealously protected. South of the Signal Station, and 1100 ft. above the sea, is St Michael's Cave, visited by special permission only; an entrance scarcely 6 ft. wide leads into a hall 200 ft. long and 60 ft high, supported by stalactite pillars like Gothic arches. Beyond smaller caves have been traversed to a distance of 288 ft. In Windmill Hill are the four Genista caves, where many bones of men and animals have been discovered. A complete "Neanderthal" skull was found in 1929.

Beyond the Land Port Gate is a causeway leading into Spain, with the bay on the left, and the "Inundation," a sheet of water so called, on the right. Beyond these is the North Front, where are the Victoria Gardens and the race-course. An aircraft runway, 1000 yards long, projects into Algeciras Bay The Eastern beach is called "Ramsgate and Margate," in Catalan Bay. Across the isthmus is the Neutral Ground Behind the Spanish lines is the town of La Linea de la Conception, housing many workmen who come daily to Gibraltar The Calpe Hunt meets in Spain

MARSEILLES (826 m. from London by railway).—Passengers to India (or Gibraltar) will find the steamer berthed at mole C, at the Western end of the Bassin National, and some 2½ m. distant from the ordinary railway station. The Grand Hotel Terminus at the station (Gare St Charles) is convenient for one night.

Passengers who have time to spare can drive up the main street or Cannebière to the Museum, with a Picture Gallery and Zoological Gardens, and then from the middle of the former by the Rue de Rome and the Prado to the coast East of the city, and along that back to the Port by the Corniche, finally visiting the church of Notre Dame de la Garde (by a funicular lift) for the sake of the splendid view, which includes the Chateau d'If of *Monte Cristo* The same round can be made by the electric tramways.

Passengers *viâ* Marseilles should leave London in good time from Victoria Station and drive across Paris from the Gare du Nord to the Gare de Lyon. No time should be lost in joining the steamer

On the voyage to Port Said the Straits of Bonifacio (230 m.) divide Corsica (French) from Sardinia (Italian). Stromboli, the volcano in the Lipari Islands, is about 450 m., and the Straits of Messina about 630 m., from Marseilles Reggio in Italy and Messina in Sicily blaze with light at night, and the earthquake of 1908, which destroyed both places and killed 100,000 people, is only a memory Mt. Etna may be seen after passing the Straits. The only land now to be seen is Crete, as the route lies too far N. of Malta.

MALTA.—George Cross.—On the direct run to Malta **Algiers** (French since 1842) may possibly be seen, its white buildings stretching like a triangle, with its base on the sea and the apex on higher ground **Cape Fez** and the promontory of the **Seven Capes**, jagged, irregular headlands, are passed on the starboard side, also **Cape Bon**, the most Northern point of Africa, and the Island of **Pantellaria**, the ancient Cossyra, between Cape Bon and Sicily. It is 8 m. long, volcanic, and rises to a height of more than 2000 ft There is a town of the same name near the seashore, on the western slope, where there is much cultivation. Although strongly fortified it was captured by the allies in 1942.

The Maltese group of islands consists of **Gozo**, **Comino**, and **Malta**, and stretches from N W to S E., the total distance from San Dimitri, the most W. point of Gozo, to Ras Benhisa, the most S. part of Malta, being about 25 m From the nearest point of Gozo to Sicily is 55 m , and Africa is 187 m distant from Malta, which is 17 m long and 8 m broad, with an area of 95 sq m , and the population is 300,000 It consists of calcareous rock, the highest point being 590 ft. above the sea-level Towards the S. it ends in precipitous cliffs It has a barren appearance, but there are many fertile gardens and fields, enclosed in high walls, where fine oranges, grapes, and figs, and other crops are grown. A great deal of the soil has been imported from Sicily as a condition of trading in the past. The Maltese language is unique, a mixture of Arabic and Italian

The port somewhat E of the centre of the Northern shore consists of two fine harbours on both sides of a promontory, **Mount Xiberras**, or Sciberras, on which Valetta is built The Western or quarantine harbour, protected by **Fort Tigne** (1792) on the W., is called **Marsamuschetto**, with Fort Manoel (1732) on **Jezira Island** , the other is **Valetta**, the Grand harbour, the entrance protected on the W. by **Fort St Elmo** (1488), at the end of Sciberras (lighthouse), and on the E by **Fort Ricasoli** (1670). The Grand harbour runs away into inlets, in which are the dockyard, victualling-yard, and arsenal—all of which are commanded by the guns of **St Angelo**, a Moorish fort (A.D 870) behind St Elmo , on the E. side here is the town called Citta Vittoriosa (formerly Borgo), renamed after the Turkish repulse, and on the S. the Marsa flats. The mail steamers are moored in the quarantine harbour A long flight of steps or a lift (210 ft) leads to the **Strada San Marco**, which leads to the (King's Way) **Strada Reale**, in the town of **Valetta**, so called from Jean de La Valette, Grand Master of the Knights of St John of Jerusalem, who built it after the Turkish armament sent against Malta by Sultan Soliman II had been repelled. The foundation-stone was laid on the 28th of March 1566, and the whole town, designed by one architect, Girolamo Cassar, was completed in May 1571

Left of the Strada Reale is **St John's Cathedral** (1573), designed by

Cassar. The floor slabs bear the arms of knights of different "langues" interred in this church. The High Altar was made in 1686. In the first chapel on the right the altar-piece represents the beheading of John the Baptist, and is by M. Angelo Caravaggio. In the next chapel, which belonged to the Portuguese, are the monuments of Manoel Pinto and Grand Master Manoel de Vilhena, the latter of bronze. The third, or Spanish chapel, has the monuments of Grand Masters Perellos and N. Cotoner, and two others The fourth chapel belonged to the Provençals. The fifth chapel is sacred to the Virgin, and here are kept the town keys, taken from the Turks. On the left of the entrance is a bronze monument of Grand Master Marc Antonio Sondadario The first chapel on the left is the sacristy. The second chapel belonged to the Austrians, the third to Italians, containing pictures, ascribed to Caravaggio, of St Jerome and Mary Magdalene The fourth is the French chapel, and the fifth the Bavarian, and hence a staircase descends to the crypt, where are the sarcophagi of L'Isle Adam, the first Grand Master who ruled in Malta, de La Valette and others.

Outside the **Governor's Palace,** formerly Grand Master's, on each side are plaques, one with the citation of the award of the George Cross, the other with the Tribute of President Roosevelt (1943). Inside are armed figures carrying the shields of all the Governors from the first Grand Master to the present day. In the armoury is the original deed granted to the Knights of St John of Jerusalem by Pope Pascal II. in 1126, and the deed when they left Rhodes in 1522. In the Council room are Gobelin tapestries (1708) depicting the four Continents. The **Library** (1761), close to the Palace, contains 40,000 volumes and some Phœnician and Roman antiquities The **Opera House,** the **Bourse,** the **Courts of Justice,** once the Auberge d'Auvergne,[1] and the Union Club, once the Auberge de Provence, and the statues of L'Isle Adam and de La Valette are in the Strada Reale. The Museum is in the Auberge d'Italia (1574). The Piazza Regina and **Upper Barracca** afford splendid views of the Grand harbour. **The Military Hospital** has the largest room in Europe, 480 ft. long, erected in 1682 by Grand Master Vasconcelos. Below the Military Hospital is the Civil **Hospital for Incurables,** founded by Caterina Scappi in 1646 St Paul's (Anglican) Cathedral (1338) overlooks the W. harbour, part of the organ was built for Chester Cathedral in the reign of Charles II.

Outside Valetta is the Hypogeum (discovered 1902) with caves and a temple of Tarxien. One mile beyond the Porta Reale is the Governor's country Palace of **St Antonio.** About ½ m. farther to the S.W. is **Citta Vecchia** (Notabile), the old capital, on a ridge from 200 to 300 ft. high. The real Cathedral is here, St Paul's, and at Rabati are some curious catacombs. **St Paul's Bay,** where he landed after shipwreck (A.D 62), lies at the N.W. extremity of the island, there is a statue of bronze

[1] The Auberges were the hostels or "inns" of the Knights from these countries.

erected on an islet (Salmoneta) The neolithic ruins at **Hagiar Chem** (excavated 1839), properly Hajar Kaim, "upright stone," are near the village of Casal Crendi. These ruins, forming small enclosures, are connected with one another by passages, and all contained within one large enclosure. The building is even more impressive than Stonehenge. The main entrance is on the S S.E., and on the left of the court is an altar with the semblance of a plant rudely sculptured on it. Similar remains are found at Mnaidra and in Gozo, where there is a neolithic "Temple of the Giants."

Malta is said to have been occupied by the Phœnicians in 1500 B C and by the Greeks 736-480 B.C The Carthaginians then got possession, and the Romans took it towards the close of the Second Punic War (28 B C.). The Goths and Vandals invaded it in A D. 420. In A D. 520 Belisarius made it a province of the Byzantine Empire, the Muslims conquered it in A D 730, and Count Roger, the Norman, captured it in A.D 1090. It then passed to Louis IX , to the Count of Anjou, and to the Kings of Castile, and then to Charles V., who gave it, in 1530, to the Knights Hospitallers of St John of Jerusalem, driven from Rhodes by the Turks. On 18th May 1565 the Turks attacked St Elmo, St Angelo, and Sanglea, but the siege was raised on the 8th of September The Knights had their own flag, mint, fleet, and army, and accredited ambassadors to foreign Courts. In the archives are letters from Henry VIII., Charles II., and Anne, addressed to them as Princes A Continental Order still claims Sovereign rights On the 7th of September 1792 the French Directory commanded the Order to be annulled. The British Order was constituted by a Charter of Queen Victoria On the 7th of June 1798 Bonaparte arrived with a fleet of transports, and Malta was surrendered by Grand Master Hompesch. A tree of liberty was planted before the Palace, and churches, palaces, and charitable houses were pillaged On the 2nd of September 1798 a general revolt took place. Nelson blockaded Valetta on 2nd September 1800, by invitation recorded in an inscription (1814), and on the 5th the French commander, General Vaubois, surrendered. Since 1814 Malta has been a British possession and has a large measure of self-government since 1921 (restored 1947). There were 3000 alerts up to 14th October 1942 and 1490 planes were shot down

EGYPT, PORT SAID, AND THE SUEZ CANAL.—The land about Port Said is so low that the approach to the harbour would be difficult were it not for a lighthouse, 184 ft. high above sea-level, built of concrete, which stands a short distance inland to the right of the harbour, close to the W mole, and shows an electric light flashing and visible 20 m. off. The harbour is formed by two converging breakwaters. Near the S end of the West jetty is a statue of the founder, Ferdinand de Lesseps (1805-94), in the Consular Service in Egypt (1832-

1837), with the motto "Aperire terram gentibus." Another object is the Australian War Memorial, unveiled on 6th December 1931.

Port Said is a very important fuelling-station. The Canal Company's offices are on the embankment that separates the Dock du Commerce from the Dock de l'Arsenal. Here the passage of ships can be watched on a model for control of the traffic. Opposite the anchorage on the Marina is the French pilots' office, where the draught, breadth, length, and tonnage of each ship entering the Canal is noted Express trains leave Port Said for Ismailia, Suez, and Cairo, taking about 4½ hours to Cairo (p xxxix).

The **Canal**, formally opened 17th November 1869 by Eugénie, Empress of the French, took ten years to build, and is about 100 statute m, or 86 nautical m, in length The distance between Port Said and Ismailia by the Canal is 49 statute m., or 42 nautical m As far as Ismailia it runs due N and S., it then bends to the E. for about 35 m., and is again almost straight for the last 20 m Distances are given in statute miles

The width of the Canal is sufficient to pass ships without mooring, and the minimum depth is 38 ft. Dredging is continuous. The *Empress of Britain*, 42,348 tons, is the largest ship to have passed through. Night traffic began in 1887. The maximum speed authorised is 6½ nautical m. an hour, except in the large Bitter Lakes, where ships may go full speed.

The share capital of the Canal Company is 200,000,000 frs., of which the British Government owns 176,602 shares, bought in 1875 from the Khedive Ismail for £4,000,000. The concession ceases on 16th November 1968. The Canal route saves about 4460 m. on the length of the route (10,720 m) by the Cape of Good Hope from London to Bombay

The railway and motor road to Ismailia run on the W bank. On the W., as far as **Al Kantara** (the Bridge), is **Lake Manzala**, and on both sides a sandy desert, on which foxes, jackals, and hyenas wander at night 20 m. from Port Said the old Pelusiac branch of the Nile is crossed, and 8 m. to the E. are the ruins of the ancient city of Pelusium. At **Al Kantara**, 29 m from Port Said, the Canal intersects the caravan track between Egypt and Syria Here the passengers on the railway from Egypt to Palestine cross the Canal by ferry; and start again from the railway station on the E bank The War Cemetery has 1626 graves, of which 341 are those of Australians and New Zealanders. 10 m. to the W is **Tel Dafana**, the site of Daphne, the Taphnes of Judith, 1, 9. At 2 m. S of Al Kantara the Canal enters the **Lake Bala**, and after 12 m. reaches the promontory **Al Fardan**, which it cuts through. Thence, after 4½ m., it reaches **Al Gisr**, the highest ground in the isthmus, 65 ft. above sea-level. There was a great camp here when the works were in progress, and a staircase of 100

steps led down to the Canal. Beyond this, near the entrance to **Lake Timsa**, just half-way between Port Said and Suez, a small channel joins the maritime Canal and the Fresh-water Canal The difference of level is 17 ft., which is overcome by two locks. A steam-launch comes to meet steamers in the lake, and land passengers for

ISMAILIA (named after the Khedive Ismail) was, during the War of 1914-18, a base of operations against the Turks A Turkish pontoon is in the Residency garden. From the landing-place a road runs from E. to W. In the W. quarter are the station, the landing-quays of the Fresh-water Canal (1862), and blocks of warehouses, and beyond them the Arab village. In the E. part are the houses of the *employés*, and the works by which water is pumped from the Fresh-water Canal to Port Said. On the high ground in the immediate neighbourhood of Ismailia a fine hospital (Hôpital Saint-Vincent de Paul) has been built by the Canal Company. By the Anglo-Egyptian Treaty of 1936 the British troops in Egypt are concentrated round Ismailia and Moascar On the road to Suez is a memorial to the Defence of the Canal, 1915, on Jebel Mariam

The course of the Canal through **Lake Timsa** (48 m.), or Bahr al Timsa, "The Lake of the Crocodile" (until the water became salt), is marked by buoys. After 4 m. the Canal reaches the higher ground of Tussum, where the level of the desert is 20 ft above the sea, and here the first working encampment in the S half of the isthmus was formed in 1859 3 m to the S is **Serapeum**, where the level is from 15 to 25 ft above the sea, so called from some remains of a temple of Serapis, lying 4 m to the W 1½ m from this the Canal enters the **Bitter Lakes**, where the course in the Little Lake is again buoyed These lakes are the ancient Gulf of Heræopolis, and some authorities hold that the passage of the Israelites was through this At the N and S. ends of the principal lake is an iron lighthouse 65 ft high, on a solid masonry base After 86 m from **Port Said** the deep cutting of Shaluf is reached, in which is a band of sandstone, with layers of limestone and conglomerate, in which fossil remains of the shark, hippopotamus, tortoise, and whale, have been found. From this to the Suez mouth of the Canal is 12½ m.

It can be very cold at night while passing through the desert.

SUEZ was supposed to be the spot near which the Israelites crossed the Red Sea under the guidance of Moses and where the Egyptian army was drowned, but modern criticism tends to place the scene farther N. In the early years of the 18th century Suez was little better than a small fishing-village, galvanised now and then into commercial life by the passage of caravans going to and fro between Asia and Egypt. But in 1837, owing to the exertions of Lieutenant Thomas Waghorn (1800-1850: statue at Suez), the route through Egypt was adopted for the transit of the Indian mail, and in 1842 the P & O.

Company began running a line of steamers regularly between India and Suez. Suez soon began to increase in size and importance. It suffered, however, from the want of fresh water, until the completion (1863) of the Fresh-water Canal to Suez brought Nile water to the town. Steamers now usually anchor in the Roads, about 1 m. distant from Port Tewfik, the entrance to the Canal, and about 2½ m. from the town of Suez. A railway line runs to Ismailia and on to Cairo, with a branch to Port Said. A direct line to Cairo (1858) was abandoned.

The **Old Town** itself offers few points of interest. To the N. of the town on the heights is the chalet of the King, from which there is a magnificent view. In the foreground is the town, the harbour, the roadstead, and the mouth of the Suez Canal; to the right, the range of **Gebel Attaka**, a most striking and beautiful object, with its black-violet heights hemming in the Red Sea. Away to the east, though considerably farther S., are the rosy peaks of the Mount Sinai range; and between the two, the deep blue of the gulf.

EXCURSION TO CAIRO. On the **homeward voyage** only a visit can be paid to **Cairo**, while the steamer is passing through the Canal. The necessary arrangements will be made by wireless with Messrs Thomas Cook & Son by the purser on board, who will also receive the advertised fare. A police permit must be obtained before disembarkation. The journey by car to Cairo (80 m.) over the desert takes about three hours. On arrival at Cairo lunch is served, and the Pyramids, the Sphinx, the Citadel, and the Mosque of Muhammad Ali are visited by car; and the train is taken to Port Said. The excursion from Port Said must *not* be attempted by passengers on the mail steamers, which may not stop at Suez.

EXCURSIONS TO WELLS OF MOSES. By those landing for Egypt at Suez a pleasant excursion may be made to the **Wells** or **Fountains of Moses, Ain Musa**. It will occupy about half a day. The Canal is crossed by the ferry at El Kubri (10 m. from Suez) for caravans. From this point to Ain Musa the distance is about a mile. Messrs Thomas Cook & Son provide transport: arrangements should be made with them at Port Said.

The "Wells" are a sort of oasis, formed by a collection of springs, surrounded with tamarisk bushes and palm-trees. Dean Stanley called it "the Richmond of Suez". The water from the springs has a brackish taste. Though not mentioned in the Bible, its position has always caused it to be associated with the passage of the Red Sea by the Israelites, and tradition has fixed upon it as the spot where Moses and Miriam and the Children of Israel sang their song of triumph. It is a Quarantine Station.

THE RED SEA.—A fresh breeze from the N. generally prevails for two-thirds of the voyage down the Red Sea, and is during the winter months succeeded by an equally strong wind from the S. for

the rest of the way. During the summer the wind from the N. blows throughout the sea, but is light in the southern half, and the heat is great. The **Sinaitic Range** is the first remarkable land viewed to the E., but Sinai itself, 37 geographical m. distant, can be seen only for a few minutes.

The Red Sea extends from the head of the Gulf of Suez to the Strait of Bab-el-Mandeb, about 1300 m., and its greatest width is about 200 m. At Ras Muhammad it is split by the peninsula of Sinai into two parts—one the Gulf of Suez, about 150 m. long, and from 10 to 18 m. wide, and the other the Gulf of Akaba, about 100 m. long, and from 5 to 10 m. wide.

Wherever seen from the sea the shores of the Red Sea present an appearance of absolute sterility. A broad, sandy plain slopes inappreciably to the foot of the mountains, which are in most parts a considerable distance inland. The ordinary mail-steamer's track, however, lies down the centre of the sea, and little more than the summits of the distant mountains will be seen. A "green flash" may be seen just as the last limb of the sun dips in the water at sunset. An east wind from Arabia can be very cold in February.

Throughout the Red Sea enormous coral reefs run along the coasts in broken lines parallel to the shores, but not connected with them. They usually rise out of deep water to within a few feet of the surface. A navigable channel, from 2 to 3 m. wide, extends between them and the E. coast, and a narrower one on the W. coast. The whole sea is in course of upheaval. The former seaport of Adulis, in Annesley Bay, near Massowa, is now 4 m. inland. The occupation of Abyssinia by Italy in 1936 and their defeat in the World War lends interest to the western shore.

The tides are very uncertain. At Suez, where they are most regular, they rise from 7 ft. at spring to 4 ft. at neap tides.

During the hottest months, July to September—the prevalence of northerly winds drives the water out of the Red Sea. The S.W. monsoon is then blowing in the Indian Ocean, and the general level of the Red Sea is from 2 to 3 ft. lower than during the cooler months, when the N.E. monsoon forces water into the Gulf of Aden and thence through the Strait of Bab-el-Mandeb.

After leaving Suez the **lighthouses** seen are Zafarana and Ras Gharib, both on the W. coast before Tor is reached. Then follows the light on Ashrafi, just inside the mouth of the Gulf of Suez, and that on Shadwan, just S. of it. The light on *The Brothers* is nearly due E. of Kosseir. The Daedalus Reef, small and dangerous, lies in mid-channel in lat. 25°, and was a source of dread before the light was erected. The last light is on Perim Island, in the Bab-el-Mandeb.

Below Kosseir (lat. 26°)—the ancient Leucos Limen (White Harbour) and the port of Upper Egypt—and Ras Benas (lat. 24°),

near which was the port of Berenice, is situated **PORT SUDAN**, 870 m. S. of Suez. This port was opened by Lord Cromer for the Sudan Government in 1907. There is a regular monthly service by P. & O. steamers, and other lines touch here. It is the headquarters of a Province, and possesses a comfortable hotel (expensive), managed by the Sudan Government Railways, reached from the quayside by five minutes' row across the harbour. There is a fine Government Hospital. The Eastern Telegraph Company's office is one minute's walk from the hotel, and the National Bank of Egypt is in the town. The railway journey to Khartoum (*viâ* Berber) takes about twenty hours by express train. 30 m. S. of Port Sudan lies **SUAKIN**, now completely deserted. It was the scene of the two English expeditions of 1884, 1885, neither of which led to any result, and in 1896 was again held for the Khedive of Egypt by our troops, which caused a diversion of Osman Digma's forces, thus enabling the Khedive's troops, under Sir Herbert (the late Earl) Kitchener, the more easily to reconquer the North Sudan. The principal tribes in the vicinity are the Hadendowa and Amarar. Eritrea runs down to the Straits.

Across the sea from Suakin, on the Arabian (E.) coast, is **Jiddah**, the seaport of Mecca (Makka), 55 m. E. The anchorage is 3½ m. from the shore. Trade is done in coffee and carpets. The town is square in shape, enclosed by a wall with towers at intervals, and on the sea-face by two forts. There is a good street parallel to the sea. The people are most fanatical, and Europeans landing must behave in all respects cautiously. There are three entrances to the town on the sea side, but the central one at the jetty is the only one in ordinary use. The gate on the S. side of the town is seldom opened, that on the N. is free to all, but the E. or Mecca gate, which formerly was strictly reserved for Muslims, should be approached with caution. The so-called Tomb of Eve, with domes at head and feet, lies to the N. This is a small mosque in the centre of two long, low walls 140 ft. in length, which are supposed to enclose the grave. The antiquity of the tradition is unknown. Jiddah was bombarded by the British in 1858 in retribution for a massacre of the Consul and other British subjects by the population. Large numbers of pilgrims from India land every year at Jiddah in order to proceed on the Hajji (pilgrimage to Mecca).

HODEIDA also is on the E. coast 200 m. N. of the Straits of Bab-el-Mandeb, in lat. 14° 40′ N. The anchorage is 3½ m. from the shore. Hodeida has well-built houses and an amply-supplied market, and its mosques, with fine domes and minarets, give it a handsome appearance. **Mocha**, which it has supplanted as a commercial port, is 100 m. S.

The island of **Perim** occupies the narrowest part of the Strait of Bab-el-Mandeb ("the Gate of Tears"). It is distant 1½ m. from the Arabian coast and 9 to 10 m. from the African. The average width is 1½ m., the greatest length 3½ m. The formation is purely volcanic,

and consists of long, low hills surrounding a capacious harbour about 1¼ m. long, ½ m. in breadth, with a depth of from 4 to 6 fathoms in the best anchorages. The highest point of the island is 245 ft. above sea-level. There are water tanks that used to be supplied from Aden, but condensers are now used The lighthouse on the highest point was completed in 1861, and since then two others have been built on the shore. The Western side of the large inner harbour has been assigned to the Perim Coal Company, who have made the place one of the most perfect coaling and salvage stations in the East

Albuquerque landed in 1513, erected a high cross, and called it the island of *Vera Cruz*, a name shown on old Admiralty charts In 1799 the East India Company took possession of it, and sent a force from Bombay to hold it and prevent the French then in Egypt from passing on to India, where it was feared they would join Tipu Sultan In 1857 the French sent a ship to annex it, but they were forestalled by the Governor of Aden, and they went to Jibuti (Djibouti), from which a railway (1911) runs to Addis Adaba

Aden, lat. 12° 46′, long. E 44° 58′, situated on the E promontory of a bay 8 m. long and 4 m. wide, was long held by the Turks, who captured the port from the Arabs Marco Polo, the Venetian, visited Aden on his return from his travels in China He records "And it is a fact that when the Soldan of Babylon went against the city of Acre" (in A D 1291) "this Soldan of Aden sent to his assistance 30,000 horsemen and 40,000 camels, to the great help of the Saracens and the grievous injury of the Christians He did this a great deal more for the hate he bears the Christians than for any love he bears the Soldan" This was the Mameluke Sultan of Egypt, Malik Ashraf Khalil On the 18th February 1513 Albuquerque sailed from India with twenty ships for the conquest of Aden In the assault on the fortress their ladders broke, and although the Portuguese took "a bulwark which guarded the port with thirty-nine great pieces of cannon," they were obliged to withdraw after a four days' siege The first English vessel visited Aden in 1609

Aden was taken from the Arabs by the British on the 19th of January 1839 [1] There are Protectorates to the N. and N.E. A railway was constructed in 1915 from Aden to Lahej, 26 m., afterwards extended to Habil, 8 m farther

Formerly a part of the Bombay Presidency, Aden and the surrounding district were, on 1st April 1932, formed into a Province under the administration of a Chief Commissioner, with an Executive Council, and subject to dual control by H.M. Government and the Government of India. On 1st April 1937 the Province was transferred under the Colonial Office. The area of the Province is 80 sq. m.

It takes only a few minutes to land at the Post Office Pier.

[1] Aden was the second addition to the Empire in the reign of Queen Victoria. Victoria Island, Vancouver, was annexed in 1838

Inside the Light Ship the water shallows, and a large steamer stirs up the mud with the action of the screw. As soon as the vessel stops, scores of canoes, with one or two Somali boys in each, surround the steamer. The boys shout, "Have a dive—have a dive," and "Good boy—good boy," all together and dive for coins. Owing to fatalities from sharks, this is prohibited in the S.W. monsoon months. A shark-proof bathing place is at Goldmohur.

Steamers seldom stop for more than a few hours at Aden. Notice is always posted on board as to the desirability or not of landing.

Aden is hot, but healthy. The promontory is about 5 m. long and 3 m. broad, and the Shamsham Peak rises 1700 ft. above the sea. The lighthouse on Ras Marshag, the S.E. point, has a fixed light visible 20 m. off. A visit to the bazaar will show Arabs from Arabian Yemen, Egyptians, Swahilis from the coast of East Africa, Somalis, Jews of various sects, Parsis, British soldiers, Bombay Mahrattas, and Jack-Tars. The Crater used in former days to be the fortress of Aden. The principal buildings, a museum, and the Anglican, Scotch, and Roman Catholic churches are at Steamer Point. In the Crater there are two churches.

The **tanks** under the Peak are worth a visit; the distance by car is about 5 m. Their restoration was undertaken in 1856. The ravines which intersect the plateau of the Crater converge into one valley, and a very moderate fall of rain suffices to send a considerable torrent down it. The overflow of the upper tank falls into a lower, and so on in succession. As the annual rainfall at Aden does not exceed 6 or 7 in. Malik al Mansur, King of Yemen, at the close of the fifteenth century built an aqueduct to bring the water of the Bir Hamid into Aden. In the Crater is a memorial to men of the East Bombay Europeans who fell in 1839.

The **Salt Pans** on the way to Sheikh Othman, where there are artesian wells, are curious. The sea-water is pumped into shallow pans and allowed to evaporate; an Italian company pays royalty on every ton of salt procured. The Keith-Falconer Medical Mission at Sheikh Othman, as well as at Steamer Point, was established by the Hon. Ion Keith-Falconer, Arabic Professor, Cambridge, who died there on 11th May 1887. His tomb, of fine Carrara marble, is in the military cemetery of Aden. The Mission is under the care of the doctors of the Free Church of Scotland.

After leaving Aden steamers bound for Cochin and Ceylon turn S. at the island of **Socotra**,[1] which is about 150 m. E. of Cape Guardafui, the E. point of the African continent. The island is 71 m. long and 22 m. broad. Most of the surface is a table-land about 800 ft. above

[1] Known to the Greeks and Romans as the island of Dioscorides. This name and that by which the island is now known are (according to the *Encycl. Brit.*) usually traced back to a Sanskrit form, Dvipa Sukhadhara, "the island abode of bliss."

sea-level. The capital is Tamarida, or Hadibu, on the N. coast. It is a British possession (1836) subordinate to Aden, but administered in its internal affairs by its own chiefs.

The mainland of India will be sighted behind Bombay, which lies 6° N. of Aden in lat. 18° 58′ above the Equator and long. 72° 48′ E. of Greenwich.

(4) GENERAL INFORMATION

Population and Area of India

The census of 1941 gave the population and area of India as follows :—

Dominions of India and Pakistan 1,090,171 square miles. 295,800,000 population.

Indian States and Agencies · 712,508 square miles 93,000,000 population.

Total : 1,808,679 square miles. 388,800,000 population, one-eighth in cities and towns.

Figures for British-born were not separable, and were unduly swelled by war conditions Dispositions in garrisons are omitted in the text. Population numbers over 100,000 are given for fifty-eight cities only.

The census of 1941 gave the following communal statistics in round figures (millions) ·—

Scheduled Castes .	49	Christians	6
Other Hindus .	206	Sikhs .	6
Muslims . .	92		

For other census details, see p. cviii.

THE INDIAN STATES

It is impossible to travel from Bombay to Calcutta, Delhi or Madras, without passing in each case through hundreds of miles of territory which is governed by its own rulers and lies, strictly speaking, outside the Dominions of India and Pakistan

Of the six hundred and seventy-five States in India, seventy-three have rulers who are entitled to a salute of eleven guns or more and are addressed as "His Highness." The two largest States are Hyderabad in the south, with an area of 82,698 square miles, and Jammu and Kashmir in the north, with an area of 84,516 square miles. It is a remarkable fact that communal differences, which lead to serious disturbances, are unusual in the Indian States. Treaties and a Chamber of Princes regularise the relations of the States with the rest of India.

British paramountcy having ended on 15th August 1947, fresh Treaties will presumably be negotiated with one or other Dominion, in some cases with both. Statements in the text will be modified accordingly, and the term Resident may disappear.

In the Indian States old-world customs and practices survive; and the visitor who gets an invitation to observe them at Gwalior or one of the Rajput capitals, at Mysore, during the Dussara, or in the Nair kingdoms on the Malabar coast, will be amply rewarded.

THE MUSLIMS

MUHAMMAD ("the praised," from *hamd*, praise) was born at Mecca (Makka) on the 29th August 570 A D in the Koreish (Quraish) ruling tribe. His father, Abdulla, was a merchant, son of Abdul Muttalib, the patriarch of the House of Hashim; his mother's name was Amina. His father died before his birth, his mother when he was barely five years old. He remained three years in the charge of his grandfather, and on the latter's death passed to the care of his uncle, Abu Talib When twenty-five years old he became manager or agent to a rich widow named Khadija, who, although fifteen years his senior, offered him marriage. By her he had sons, who all died in infancy, and four daughters, of whom three survived, the youngest, Fatima, being married to Ali, the son of Abu Talib; from her are descended the nobility of Islam, the Saiyads and Sharifs, who wear green turbans.

At the age of forty Muhammad claimed to have received the first divine communication in the solitude of the mountain Hira, near Mecca, where the call came to him, and the angel Gabriel commanded him to preach the new religion. The Meccans persecuted him and his followers for his preachings; his wife and uncle died, and he became poverty-stricken. Threatened with death, Muhammad, accompanied by Abu Bakr, left Mecca on the 16th July 622 Escaping from the Koreish, they reached the rival city, Yathreb, some 270 m. to the N., where he was accepted as a Prophet. The city was henceforth called the city of the Prophet—Medînat-un-Nabi, or, shortly, Medina. The Meccans pursued him and the Medînists with hostility, and he repelled their attacks In the year 630 he, with 10,000 men, conquered Mecca. Returning to Medina, he died on the 8th of June 632, and was there buried.

Islam is generally held to mean submission to God, some describe it as "striving after righteousness." A Muslim, or Mussalman, is one who professes Islam. In its dogmatical form it is Iman (faith), in its practical Din (religion). The fundamental principle is "There is no God but God; and Muhammad is the Prophet of God (Lâ illâha illâ 'llâh Muhammad Rasulu 'llâh)." This is the *Kalima*, or creed, which is to be recited. There are also four principal duties: (1) Daily prayers (which should be said five times a day—at daybreak, noon, afternoon,

sunset, nightfall); (2) the giving of alms; (3) the fast of Ramazan (from dawn to sunset for a month, from the appearance of the new moon); (4) a pilgrimage (Hajj, Hajji), once in a lifetime, to the ancient shrine of the Ka'ba, at Mecca. In the Koran (which embodies the teachings and precepts of Muhammad, and is believed to have been sent down by God to the seventh or lowest heaven and then revealed from time to time to Muhammad by the angel Gabriel) a holy war or *jihad* in defence of Islam is enjoined.

Muslim subjects of a government, under which the practices of the religion of Islam are freely permitted, are bound to obey the government. They believe in resurrection, heaven, and hell, but the meaning of the description of a future existence as given in the Koran is much disputed. On the one hand large masses of Muslims accept the statements of the Koran as to the sensuous delights of Paradise in their literal sense; on the other hand, they are regarded as word-paintings used in a figurative sense. In hell all who deny the unity of God will be tortured eternally. The idea of the exclusion of women from Paradise is at variance with the whole tenor of the Koran.

Muhammad enjoined ablution of the hands, mouth, and nose before eating or praying. The Koran forbids the use of wine, including all inebriating liquors and any intoxicants. It forbids also the eating of the flesh of swine, and no animal is lawful food unless it be slaughtered by cutting the throat. Usury and games of chance are prohibited, and the laws against idolatry are very stringent.

A Muslim is allowed to marry one, two, three, or four wives, provided he can deal with all with equity; if not, he is limited to one. An absolute divorce consists of the mere repetition of the words "Thou art divorced" three times. A man must not look upon the face of any woman except a near relative.

There is no priesthood in Islam, every man is his own priest and pleads for forgiveness and mercy. It recognises no distinction of race or colour among its followers. Hope and fear, reward and punishment, with a belief in predestination, form the system of faith. It is contrary to Islam to make any figure or representation of anything living. The Muslim now attaches great importance to old mosques, and will not consent to demolition, even if they have long been disused. His name is selected from the ninety-nine tributes of Allah. Difference between two divisions arises out of the question of the title to the spiritual and temporal headship of Islam. The Sunnis advocate the principle of election, and recognise Abu Bakr, Omar, and Othman as the first three Khalifas (Khalifa, Caliph—Vicegerent), and Ali as the fourth; the Shias adhere to apostolical descent by appointment and succession, and regard Ali as the first Khalifa. In India about five-sevenths are Sunnis. These are again divided into four principal "persuasions"—the Hanafi, Shafei, Maliki, and Hanbali—after their

founders. Shiaism is the State religion of Persia. In the 16th century Sultan Salim, the great Osmanli conqueror, obtained the Caliphate from the last Caliph at Cairo; the Osmanli rulers of Turkey were recognised as spiritual head, *Shaikh-ul-Islam*, by the bulk of the Sunnis in India and elsewhere. In November 1922 the Grand National Assembly at Ankara declared that the office of Sultan had ceased to exist, and in March 1924 abolished the Caliphate.

Muslim historians, poets, and musicians have contributed to culture. Painters have produced miniatures and illuminated manuscripts. Hakims practise medicine.

Eras.—The Hijra era takes its name from the "departure" of Muhammad from Mecca, commencing with the date of Friday, the 16th of July 622 A.D., ordered by the Khalifa Omar to be used. The year consists of twelve lunar months, as follows:—

Muharram	30 days	Rajab	30 days
Safar	29 ,,	Sh'aban	29 ,,
Rabi ul awal	30 ,,	Ramazan	30 ,,
Rabi us-sani	29 ,,	Shawwal	29 ,,
Jumada ul awal	30 ,,	Zilkada	30 ,,
Jumada us-sani	29 ,,	Zil Hijja	29 ,,

354 days

The year, therefore, is 11 days short of the solar year. Every 30 years the month Zil Hijja is adjusted. To correlate the Hijra year with the Christian year, express the former in years and decimals of a year, multiply by ·970225, add 621·54, and the total will correspond exactly to the Christian year. Or to effect the same correspondence roughly, deduct 3 per cent. from the Hijra year and add 621·54. The year 1368 Hijra commenced on the 3rd November 1948.

During the month of Ramazan, which commenced 10th July 1947, and therefore 11 days earlier in each succeeding year, the Muslim goes without food or water from sunrise to sunset. A Muslim servant should be allowed to break his fast immediately after sunset, and be treated with consideration during this trying month, and be granted leave to attend at the Idgah on the day following.

The Tarikh Ilahi or Era of Akbar, and the Fasli or Harvest Era.

These eras begin from the commencement of Akbar's reign on Friday, the 5th of Rabi-us-sani, 963 A.H. 19th of February 1556 A.D.

Festivals

Bakar Id, Id-ul-uzha, or *uz-zoha*, or *Id-i-kurban* (sacrince), is held on the 10th of Zil Hijja in memory of Abraham's offering of Ishmael, which is the version of the Koran. Camels, cows, sheep, goats, kids, or lambs, are sacrificed.

Muharram (The Sacred [1]) is a period of mourning (the Shias fast on some of the days) in remembrance of the death of Husain, the son of Ali by Fatima, the daughter of Muhammad. Hasan, eldest son of Ali, was poisoned at the instigation of the future Khalif Yezid in 49 A.H., and Husain was murdered at Karbala on the 10th of Muharram, 61 A.H.=9th October 680 A.D. The fast begins on the 1st of Muharram and lasts ten days. Muslims of the Shia persuasion assemble in the Ta'ziya Khana, or house of mourning. On the night of the 7th an image of Burak, the animal (vehicle) on which Muhammad is popularly supposed to have ascended to heaven, is carried in procession, and on the 10th Tabuts [2] or Taziyas (biers). These are thrown into the sea, or other water, and in the absence of water are buried in the earth. The mourners move in a circle, beating their breasts with cries of "Ya Hasan! Ya Husain!" or "Ya Ali!" At this time fanatical spirit is apt to run high, and serious disturbances sometimes occur (see "Hobson-Jobson" in the *Glossary of Anglo-Indian Words and Phrases*, Yule and Burnell, Murray, 1903).

Akhiri-Chahar Shamba, held on the last Wednesday of Safar, when Muhammad recovered a little in his last illness and bathed for the last time. It is proper to write out seven blessings, wash off the ink and drink it, as also to bathe and repeat prayers.

Bárah Wafát, held on the 12th of Rabi ul awal in memory of Muhammad's death, 11 A.H.

Shab-i-barát (night of allotment), held on the 16th of Sh'aban, when it is supposed that human deeds are measured and their meeds allotted: only observed in India, celebrated with fireworks. The Koran ought to be read all night, a sermon is preached, and the next day a fast should be observed.

Ramazan,[3] the month of fasting of the Muhammadans. The night of the 27th is called Lailat-ul-Kadr, "night of power," because the Koran came down from heaven on that night.

'Idu 'l-fitr (also called Id-us-sadaqah or Feast of Alms), the festival when the fast of the Ramazan ends after the new moon has been seen. The evening is spent in rejoicings.

THE HINDUS

Such words as Vedism, Brahmanism, and Hinduism are not recognised by the Hindu orthodoxy. They do not connote religion in the sense of a system of worship, etc., which would lead to heaven or give man his desires through the medium of a deity.

[1] The name is derived from the corresponding old Arabic month, in which it was unholy to wage war.

[2] The shape of this is intended to simulate the tomb of Ali at Karbala.

[3] The name is derived from ramaz, burning, this month being the middle summer month in the first Muhammadan year.

The first form of the Hindu "religion" was Vedism, the worship of Nature, as represented in the songs and prayers collectively called Veda, and in which the chief gods were the triad, Indra (rain), Agni (fire), and Surya (sun). Then followed Brahmanism, which introduced the idea of a universal spirit, or essence, which permeated everything, men, gods, and the visible world being merely its manifestations. Prose works, called Brahmanas, were added to the Vedas, to explain the sacrifices and the duties of the Brahmans, or priests. The oldest of these may have been written about 1000 to 1200 B.C.

The code of Manu (100-300 A.D.)[1] laid down the rules of domestic conduct and ceremony. It divided Hindus[2] into four *Varnas* (lit. "colours")—first, the Brahmans, second, the warriors, called Kshatriyas, and third, the agriculturists and traders, called Vaisyas (All these, being of Aryan descent, were honoured by the name "twice born") Fourth were the Sudras, or non-Aryan tribes Thus a Hindu is born a Hindu, neither baptised into nor converted to Hinduism

During the time of Manu racial distinction between the Aryans and non-Aryans ceased, and the Sudras included all persons who were not born in the twice-born status. The Sudras were not allowed to be present at the great national sacrifices or at the feasts The priests asserted that they, the Brahmans, came from the mouth of Brahma; the Rajputs, or Kshatriyas, from his arms, the Vaisyas from his thighs, and the Sudras from his feet. Each trade in time came to have a separate caste; and the priests insisted on the *varna*-duties because they held that social order was dependent thereon In the 1941 Census, however, many professed Hindus were unable to name their castes

Hindu mythology is described mainly as a means of identification of sculptures. There is one impersonal and spiritual Being which pervades everything—one God, called Brahm. His three personal manifestations are as *Brahma*, the Creator, *Vishnu*, the Preserver, and *Siva*, the Destroyer and Reproducer. *Brahma*, the Creator, is generally represented with four heads and four arms, in which he holds a portion of the Veda, a spoon for lustral observations, a rosary, and a vessel of lustral water (see Plate 1) *Sarasvati*, the wife of Brahma, rides on a peacock, and has a musical instrument, the "vina," in her arms (see Plate 1). She is the goddess of music, speech, the arts, and literature.

Vishnu holds a quoit in one hand, a conch shell in another, and sometimes a mace or club in another, and a lotus flower in a fourth (see Plate 1). A common picture shows him with his wife, Lakshmi,

[1] Cambridge *History of India*, Vol 1., *Ancient India*, p 278.

[2] Much interesting information regarding the early Hindu peoples of India will be found in Mr R. C. Dutt's *Ancient India*, Mr V. A. Smith's *Early History of India*, and the Cambridge *History of India*, Vol 1, *Ancient India*, 1922.

sitting on Shesh, the snake (eternity), with Brahma on a lotus springing from his navel (see Plate 2). He is said to have come down to the earth nine times, and is expected a tenth time. These nine incarnations (*avatara*) were in the form of—(1) a fish, (2) a tortoise; (3) a boar (*Varaha*); (4) a man lion (*Narsingh*); (5) a dwarf (*Vamana*), (6) *Parasu rama*; (7) *Rama*, the hero of the epic poem, the *Ramayana*, (8) *Krishna*, and (9) *Buddha*

Rama carries a bow and arrows (see Plate 1) He is revered throughout India as the model of a son, a brother, and a husband When friends meet it is common for them to salute each other by uttering Rama's name twice His name is frequently given to children, or is usually invoked at funerals and in the hour of death His ally, *Hanuman* (p liv), is represented under a monkey form (see Plate 1) He is the model of a faithful, devoted servant, and often appears at the gates of forts

Krishna's biography is given in the epic of the *Mahabharata* Although himself a powerful Chief, he was brought up among peasants, and is peculiarly the god of the lower classes As a boy he vanquished the serpent Kaliya by trampling upon his head He lifted the mountain-ridge of Gobardhan (p 256) on his finger to shelter the herdsmen's wives from the wrath of Indra, the Vedic rain-god He had countless wives and sons, and is painted dark blue Blue birds such as the pigeon and the peacock are sacred for this reason Sometimes he is represented as standing on a snake, with his left hand holding its body and a lotus in his right (see Plate 2), and sometimes he is playing the flute

The adoption of Buddha as one of the incarnations aimed at a compromise with Buddhism This led in India to the reabsorption of Buddhism into the general Hindu culture

Devotion to Vishnu is directed principally to his human incarnations of Rama and Krishna His descents upon earth were for the delivery of men from the threefold miseries of life—viz., (1) from lust, anger, avarice, and their evil consequences, (2) from beasts, snakes, and wicked men; (3) from demons Vishnu has power to elevate his worshippers to eternal bliss in his own heaven

Vishnu's wife, *Lakshmi*, the goddess of wealth and beauty, sprang from the froth of the ocean when churned by gods and demons (see Plate 1). An image of her is often to be found in the houses of shopkeepers She is worshipped during the Diwali festival

Siva is also called Mahadeva, the great god, and his wife, who is known by several names and in several characters as Parvati, the goddess of beauty (see Plate 1), Durga, or Kali, the terrible (see Plate 1), etc., is also called Devi, *the* goddess (see Plate 1). The commonest of these is *Kali*,[1] who requires to be propitiated by

[1] In S India Durga in this form is generally known as Bhawáni

sacrifices. Siva holds in his four hands a trident, an antelope, a noose for binding his enemies, and a kind of drum, and wears a tiger's skin about the loins. He is a less human and more mystical god than Vishnu, and is worshipped in the form of a symbol, the *lingam*, or a bull (*Nandi*, the Joyous). As destroyer Siva haunts cemeteries and burning-grounds, but his terrible qualities are now more especially associated with his wife, Kali. He is the impersonation of the reproductive power of nature,[1] the word Siva meaning "blessed" or "auspicious". He is also the typical ascetic and self-mortifier; and as a learned philosopher he is the chief god of the priests.

Siva has two sons—Ganesh, or Ganapati, and Kartikkeya. *Ganesh* has a fat body and an elephant's head (see Plate 1). He is invoked at the beginning of every Indian book as a bringer of success, and also because he is the god of learning. *Kartikkeya* is the god of war, the leader of the hosts of good demons (see Plate 1). In the south of India he is called Skanda or Subrahmanya.

There are very few (some say only three) temples dedicated to Brahma. Hindus are (with few exceptions) Vaishnavite or Sivite. It is reasoned that Vishnu the "Preserver" can destroy by ceasing to preserve, and can also create. On Plate 2 he is shown contemplating the creation of the world. Similarly Siva the "Destroyer" can preserve by refraining from destruction, and can create also. Therefore both are worshipped as possessing all the attributes of the Trinity.

The Hindu theory of metempsychosis or transmigration of souls arises from the belief that evil proceeds from antecedent evil, and that the penalty must be suffered in succeeding existences. The uneducated Hindu makes offerings to the image of a god, he abstains from killing any animal, he gives money to the priests, and does penances which extend to severe bodily torture. The caste rules have to be strictly kept, and the priests presented with gifts. Great care has to be taken not to eat food cooked by a man of inferior caste, the Hindu waterman at a railway station must be a high-caste Brahman. The castes are entirely separated with regard to marriage. He endeavours to marry a daughter to one of a higher sub-caste, and this leads to competition in the matter of a dowry. The Hindu has a special theory about purity and pollution. A sacred thread of cotton is worn by the higher castes. Pilgrimages are common. Washing in any holy river, particularly the Ganges, and more especially at certain exceptionally sacred spots, is of great efficacy in cleansing the soul of impurities.[2]

[1] Probably two-thirds of the Hindus worship Siva under this aspect embodied in the lingam.

[2] A sign of the times is the "Pilgrim Special" train which runs in October from Jamnagar in Kathiawar (p. 245) to all the principal places of Hindu pilgrimage including Ujjain (p. 130), Allahabad (p. 47), Hardwar (p. 412), Benares (p. 86), Puri (p. 501) and Rameswaram (p. 669), and returns after a journey of two months.

The worship of idols is rejected by the Arya Samaj, a reformed body founded by Swami Dayanand (1827-53), which has attracted many educated Hindus in N. India and which accepts the inspiration of the Vedas only. Another sect of Hindu reformers, the Brahmo Samaj, founded 1830 by Raja Ram Mohan Roy, rejects them as inspired scriptures, and is unitarian in its doctrine. But while the Arya Samaj commands a wide following, the influence exercised by the Brahmo Samaj (almost entirely confined to Bengal) is out of all proportion to its numbers

Travellers must not touch any cooking or water-holding utensil belonging to a Hindu, nor let their shadows fall on strict Hindus when at their meals, and they should not seek to approach any holy place if objection is made The most revered of all animals is the cow. Garuda, a mythical being, half man, half bird, is the vehicle of Vishnu, the bull (Nandi) of Siva, the goose of Brahma, the elephant of Indra, the tiger of Durga, the buffalo of Yama, the rat of Ganesh, the ram of Agni, the peacock of Kartikkeya, and the parrot of Kama (the god of love).

The Mahabharata and Ramayana

The *Mahabharata* in its present form was compiled about 400 B.C. to 400 A.D., but recording events which may be referred to about 1500 B.C. celebrated the battle between the Pandava (Pandu) and Kaurava (Kuru) Princes The former, five in number, named Yudhishthir, Bhima, and Arjun, sons of one mother, and Nakula and Sahadeva, sons of another, were the offspring of Pandu, ruler of Hastinapur, an ancient city on the Ganges, 60 m N.W. of Delhi, who ceded the kingdom to his elder, but blind brother, Dhritarashtra The Kauravas were the sons of Dhritarashtra, and compelled him to send their cousins into exile, during which the marriage of Draupadi, daughter of Drupada, King of the Panchalas, took place, and most of the adventures which led to their names being attached to so many places all over India. At the end of their exile the Pandavas received the Southern portion of the Hastinapur kingdom, and settled at Indraprastha, now Indrapat (p. 302). Having lost this share of their inheritance through gambling with their cousins, the Pandavas again went into exile for twelve years, after which they returned with an army and claimed five "pats," or small towns, of their former kingdom (Indrapat, Tilpat, Sonepat, Bhagpat, and Panipat). Over this claim the great battle ensued, in which, after eighteen days, nearly all the Kauravas were finally killed, largely through treacherous acts on the part of the Pandavas. The account of the funeral ceremonies of the slain is almost Homeric The five brothers then resumed their residence

at Indrapat, and Yudhishthir celebrated the Aswamedha, or horse sacrifice, on the bank of the Jumna. A horse was let loose to wander as it pleased under guard for a year, and, if no other king could capture it, imperial rule was claimed and the horse was sacrificed. Finally the brethren and their wives retired to the Himalayas and sought to reach Mount Meru,* but only the eldest brother was admitted with his dog

The *Ramayana*, ascribed to Valmiki, and probably compiled about the 5th century B.C., related the adventures of Rama, elder son of a King of Oudh, who was passed over in the succession in favour of the son of a younger wife, and banished by his father Rama accordingly proceeded into exile with his wife Sita to the abode of the hermit Valmiki; and, although his half-brother proved loyal to him on his father's death, he refused to return to Oudh until the term of his banishment had expired. Before this Sita was carried off from their forest abode by Ravana, king of Lankā (Ceylon), inspired by his sister, whose love Rama had rejected She was rescued from Lankā by Rama with the help of Hanuman, the monkey general, and proved her chastity by the ordeal of fire, but (according to a later tradition) was banished by her husband, and only after sixteen years in exile with Valmiki was finally reconciled to Rama, who is commonly known in India as Ram Chandra, his brother Lakshman constantly appears in local legends.

Ajodhya (p 422), which ranks as one of the seven sacred Hindu shrines, is famous as the birthplace of Rama and also as the scene of his cremation

The Bhagavadgita is a long exhortation of Krishna as charioteer of Arjuna on the duties of a soldier. It has been translated into at least six Persian versions but also perverted to the purposes of the anarchist.

The Era of Vikramaditya, or Samvat

This era commenced from the first year of the legendary King Vikramaditya, on the 23rd February 57 B.C. It is in ordinary use in N India The Vikramajit year, as it is usually called, 2004, corresponds to 1947 (See p 239 for other eras)

The Saka Era

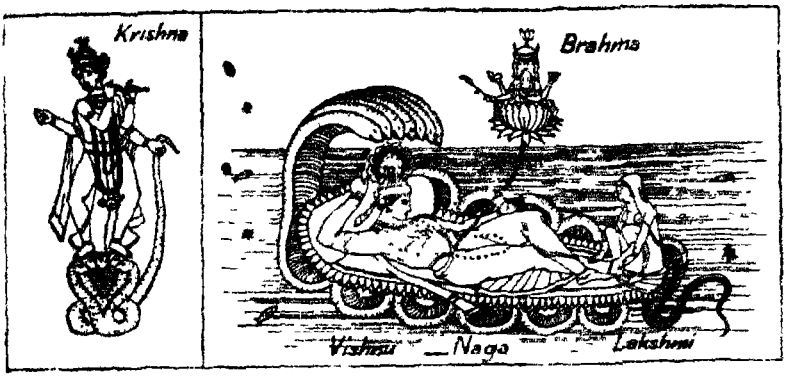
The Saka era dates from 3rd March 78 A.D. This is the era in general use in S. India The year 1869 of this era corresponds to 1947

The days of the week (under different names, of course) correspond with European usage, e.g. Sanichar = Saturday

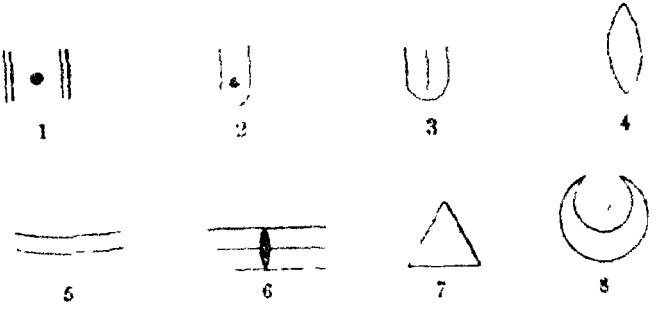
PLATE 1.

Some Common Forms of Hindu Gods.

PLATE 2.



Sect Marks



1, 2, 3 and 4 Vaishnavas
5, 6, 7 and 8 Saivas

Buddha

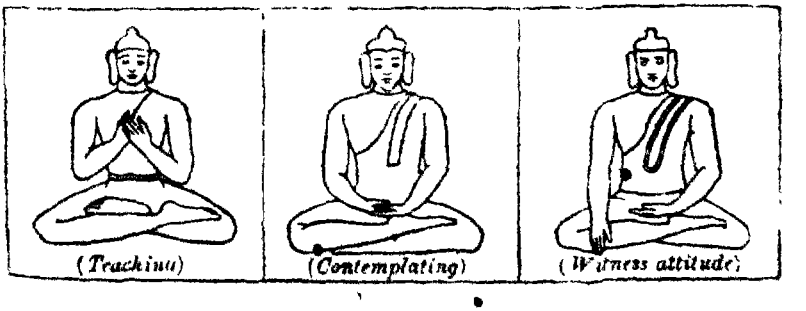


Table of the Seasons and Months in Sanskrit, Hindi, and English.

	Names of Months.		
	Sanskrit.	Hindi.	English.
1 Vasanta spring	Chaitra (Aries).	Chait	March-April.
	Vaishakha.	Baisakh	April-May.
2 Grishma hot season	Jyeshtha (Gemini)	Jeth	May-June.
	Aushadha	Asarh	June-July
3 Varsha rains	Sravana (Leo)	Sawan	July-August
	Bhadra (Virgo)	Bhadon	August-Sept
4 Sharada autumn	Ashwina	Asin	Sept-Oct
	Kartika	Kartik	Oct-Nov
5 Hemanta winter	Margasirsha	Aghan	Nov-Dec
	Pausha	Pús	Dec.-Jan
6 Shishira cool season	Magha	Magh	Jan-Feb
	Phalguna (Pisces)	Phagun	Feb-March

Some Hindu Festivals

Makar Sankranti On the 1st of the month Magh (about 12th January) the sun enters the sign Capricorn or Makar From this day till the arrival of the sun at its extreme N altitude the period is called Uttarayana, and from that time till he returns to Makar is Dakshinayana, the former period being lucky and the latter unlucky. At this festival the Hindus bathe and rub themselves with sesamum oil They also invite Brahmans and give them pots full of sesamum seed They wear new clothes with ornaments and distribute sesamum seed mixed with sugar

Vasant Panchami is on the 5th day of the light half of Magh and is a festival in honour of vasanta or spring Students lay writing materials and books at the feet of the goddess Saraswati.

Sivarat, the night of Siva, is held about the middle or end of February, when Siva is worshipped with flowers during the whole night

Holi.—A saturnalia at the vernal equinox, celebrated with the squirting or throwing of red or yellow powder Servants should be warned to stay away.

Janam Ashtami, held on the 8th of the dark half of Sawan, when Krishna is said to have been born at Gokul (p. 255) At night Hindus bathe and worship an image of Krishna, adorning it with *tulsi* or *basil*.

Ganesh Chaturthi, held on the 4th of Bhadon, in honour of Ganesh, a clay image of the god being worshipped and Brahmans entertained The Hindus are prohibited from looking at the moon on this day, and, if by accident they should see it, they get their neighbours to abuse them in order to remove the curse.

Dasahara (*Dasaha*) or ten days, commonly Dussera), held on the 10th of Asin, in honour of Durga, or Devi, the wife of Siva, who on this day slew the buffalo-headed demon Maheshasur. On this day Rama marched against Ravana, and for this reason the Mahrattas and the Thugs chose it for setting out on their expeditions Branches of the *Butea frondosa* are offered at the temples This is an auspicious day for sending children to school The nine preceding days are called Navaratra, when Brahmans are paid to recite hymns to Durga The Durga Puja holiday is the principal holiday of the year in Bengal and the Dasahara is celebrated with great ceremony in Mysore, early in October

Diwali, "feast of lamps," held on the new moon of Kartik, in honour of Lakshmi, the goddess of prosperity, when merchants and bankers count their wealth and worship it. It is said that Vishnu killed a giant on that day, and the women went to meet him with lighted lamps. In memory of this, lighted lamps, of humble earthenware or blazing electric bulbs, according to means, are displayed from all houses, and are set afloat in rivers and in the sea, and auguries are drawn from them according as they remain lit or are extinguished

THE SIKHS

THE Sikhs[1] are a reformed sect of Hindus who follow a teacher named Nanak, born near Lahore in 1469; they are not a race, but a brotherhood The word Sikh means a "disciple" of the Guru or teacher Nanak's teaching was a reformation of Hinduism combined with various foreign elements All the Gurus inveighed against caste, Guru Govind finally abolished it, established the religion (1675) on a political and military basis, proclaimed as the depository of the principles and doctrines of the Sikh religion the Granth, or holy book which is now the principal object of the Sikh devotions, and definitely established the Khálsa, as the Sikh brotherhood is called (Khálsa is from the Arabic *Khalis*, which means pure, and was meant by the Guru to indicate the purity of his faith)

In the middle of the 18th century the Sikhs, who had been gradually rising into power, struggled with the Afghans for supremacy in the Punjab and finally won it. In 1715 Banda had been tortured to death by the Mughals; and in 1763 they avenged his fate by destroying Sirhind utterly Banda was not a Guru, he was an agent sent by

[1] Pronounced like "seeks", but, more correctly, "sikh."

Guru Govind Singh (*c* 1708) from the Deccan to avenge the indignities offered to the Sikhs by the Muslims. Sirhind was the place where two of Guru Govind's children were barbarously put to death. The next year, in 1764, they fought a long and doubtful battle with the Afghan Ahmad Shah Durani in the vicinity of Amritsar, and on his retirement they took Lahore, which soon became the centre of their power, Amritsar being the religious centre. The government was at first in the hands of a number of *misls*, or confederacies, which were gradually absorbed by Ranjit Singh of the Sukarchakia Misl, who finally became Maharaja and the head of the Sikhs. In 1799 he obtained Lahore from the Afghan ruler, and in 1802 Amritsar. He occupied Ludhiana in 1806, and in 1809 made the Treaty of Amritsar by which British dominions were advanced to the Sutlej. By 1820 he was paramount in the Punjab, and in 1823 drove the Afghans to the hills beyond Peshawar. In 1835 he gave some assistance in the First Afghan War.

Ranjit Singh died in 1839, and his son Kharak Singh and his grandson Nao Nihal Singh died in November the next year, the latter from injuries received in passing a gateway as he was returning from the funeral of his father. Maharaja Sher Singh became ruler of Lahore and was murdered in September 1843 by the Sindhanwalia Sirdars, who also killed the Prime Minister Raja Dhian Singh, of Jammu, and upon this Dhalip Singh, a putative son of Maharaja Ranjit Singh, succeeded. His mother, Rani Jindan, attempted to rule through Hira Singh, son of Dhian Singh, Jowahir Singh, her brother, and Lal Singh, her lover, but the first two in turn were murdered, and the real power in the State rested with the army and with Raja Gulab Singh, of Jammu. To relieve themselves of their embarrassments with the army, the Rani and her counsellors encouraged a war with the British against whom various causes of complaint were alleged, and finally, the army breaking away from all control crossed the Sutlej at Hariki early in December 1845. Upon this followed the First Sikh War, which was ended by the battle of Sobraon on 10th February 1846 (p. 346), the Jullundur Doab being annexed to the British possessions and Kashmir being transferred to Gulab Singh, ancestor of the present Maharaja, upon payment by him of the war indemnity. Administration was placed by the Treaty of Bhairowal under a council of regency on behalf of the minor Maharaja Dhalip Singh, subject to the advice of the Resident in Lahore, first Sir Henry Lawrence and then Sir Frederick Currie. Matters were progressing as well as could be expected when the incident of Multan (p. 394) occurred on 20th April 1848, upon which the Sikh soldiery and people rose in defence of their national cause. Serious operations against them were not taken till December, when, after unsatisfactory skirmishes at Ramnagar and Sadulpur (22nd November and 3rd December 1848), the battle of Chilianwala

(p. 363) was fought on 13th January 1849, and the victory of Gujrat was won on 21st February Since then the Sikhs have been among the most loyal subjects of the Indian Empire, of which they proved the main support in 1857, and provide some of the best recruits of the Indian army

The following is a chronological table of the ten Sikh Gurus:

		BORN	GURU
1.	Nanak, founder of the Sikh sect	1469	till he died, 1538
2	Angad	1504	1538-1552
3	Amar Das	1509	1552-1574
4	Ram Das, builder of the original lake temple at Amritsar (1577)	1534	1574-1581
5	Arjan Mal, compiler of the Adi Granth (1604)	1563	1581-1606
6	Har Govind, first warlike leader	1595	1606-1645
7	Har Rai, his grandson	1630	1645-1661
8	Har Krishna, died at Delhi	1656	1661-1664
9	Tegh Bahadur, put to death by Aurangzeb .	1622	1664-1675
10	Govind Singh remodelled the Sikh Government, assassinated at Nander (p 85)	1666	1675-1708

Guru Govind refused to name a successor He said "He who wishes to behold the Guru, let him search the Granth."

The Sikhs are known now either as Malwai (which comprises those S. and E. of the Sutlej and Beas) or Manjha (lying N and W of these, in the Bari Doab between the Sutlej and the Ravi). They are represented among the ruling Chiefs of India by the three Phulkian houses, of which the Maharaja of Patiala and the Rajas of Jind and Nabha are the heads, and by the Rajas of Kapurthala and Faridkot, the first three and the last in the Malwai country and the fourth in the Jullundur Doab The present ruling family of the Jammu and Kashmir State, which is Dogra Rajput by descent, is no longer Sikh by religion. It should be remembered that a Sikh is not necessarily born of that religion, but is baptized into it when of adult age, and that in consequence some of the sons of Sikhs fall back into the Hindu religion by simply not taking the *khandi-di-pahal*, the initiatory rite, usually performed at the Amritsar temple The greater proportion of the Sikhs are called Sahijdhari (independent or practising trade or agriculture), and are not baptized at all. They do not consider it necessary to wear the habiliments of the Sikhs.

Orthodox Sikhs are distinguished by the five *kakkars* -uncut hair (*kesh*), short drawers (*kachh*), iron bangle (*kara*), wooden comb (*kanga*) and iron-handled knife round which the hair was rolled but has become

longer and a dangerous weapon (*kirpan*). A quoit is worn in the hair by Akhalis.

In his work on *The Sikh Religion* (6 vols., Oxford, 1909), Mr M. A. Macauliffe wrote:—"To sum up some of the moral and political merits of the Sikh religion: It prohibits idolatry, hypocrisy, caste exclusiveness, the concremation of widows, the immurement of women, the use of wine and other intoxicants, tobacco-smoking, infanticide, slander, pilgrimages to the sacred rivers and tanks of the Hindus, and it inculcates loyalty, gratitude for all favours received, philanthropy, justice, impartiality, truth, honesty, and all the moral and domestic virtues known to the holiest citizens of any country."

The Sikhs in the Punjab numbered over three and three-quarter millions in 1941. They are skilled artisans, mechanics and cultivators many of whom are wealthy.

THE RAJPUTS

ALTHOUGH the Rajputs are Hindus they have a title to notice as one of the historic races of India

Their annals are a veritable mine of feudal romance and knightly chivalry. "There is not a petty State in Rajasthan which has not had its Thermopylæ," writes their chronicler, Colonel James Tod, "and scarcely a city which has not produced its Leonidas"

Of the several States within the area known as Rajputana, Jaisalmer, Jodhpur (or Marwar), and Bikaner form a group on the west and north. Alwar lies likewise to the north In the east and south-east are Jaipur, Bharatpur (Bhurtpore), Dholpur, Karauli, Bundi, Kotah, and Jhalawar. Those in the south are Partabgarh, Banswara, Dungarpur, and Udaipur or Mewar, with Sirohi on the south-west

The province of Ajmer-Merwara occupies the centre, and is surrounded by the State of Kishangarh, the chiefships of Shahpura and Lawa, and parts of the Muslim State of Tonk (1813). With the exception of Bharatpur and Dholpur, whose rulers are Jats, and Tonk, the princes are all Rajputs The ruling families of the majority of the States in Kathiawar (which lies to the west) are also Rajputs. The Jadeja clan is represented in Cutch, Morvi, Gondal and Nawanagar (whose late ruler, Maharaja Jam Sahib Sir Ranjitsinhji, was a familiar figure in English first-class cricket). Other clans are the Gohels (Bhaunagar and Palitana), the Jethwas (Porbandar) and the Jhalas.

Udaipur (Mewar), Jodhpur (Marwar), Jaipur and Bundi are the four original great States of Rajputana proper. Descent from the Sun is claimed by the Maharana of Udaipur who is head of the Sesodia clan, and there is no blood in India which is bluer than his. To him is conceded by common consent the pride of place among Rajputs. He shares with the Maharawal of the desert State of Jaisalmer, who

is the chief of the Bhatti Rajputs, the distinction of belonging to a dynasty which, in defiance of eight centuries of foreign domination, holds sway over the lands won by the strong arm of his ancestor His is the only clan which never gave a daughter in marriage to the Moguls at Delhi. Round the fortress of Chitor legends of a glorious past cling. Three times did Chitor suffer the horrors of sack. Time after time, when all hope was lost, the fatal *johar* was commanded. The women committed their bodies to the flames, and the men, arrayed in bridal robes of saffron, sallied out and died fighting. The last conqueror of Chitor was Akbar in 1567. Thirty thousand of her inhabitants fell on that day: and the invocation of "the sin of the slaughter of Chitor" still exercises a binding spell upon every Rajput. But although overwhelmed the men of Mewar remained undismayed: calamity was made a whetstone to courage In fulfilment of the vow made by his great forebear Rana Pratap Singh in the time of his tribulation, the Maharana may not set foot in Delhi: his beard is untouched by the shears, and leaves are placed beneath his plate, and straw under his bed, as a mark of fallen fortune

Even when the Rajput was compelled to make a virtue of necessity and gave his daughter in marriage to the Mogul, as in the case of the Rathor princes of Jodhpur, the personality of the Hindu was never submerged. Some of the most celebrated Emperors, such as Jahangir, Shah Jahan, and Aurangzeb, were the sons of Rajput princesses.[1] The most brilliant conquests of Akbar Jahangir and Aurangzeb were made by their Rajput generals. To the same royal house as Jodhpur belonged the late Maharaja of Bikaner, who represented India at the Peace Conference at Versailles, and the late Maharaja of Idar, a State in Mahi Kantha in the Bombay Presidency, on the western border of Rajputana. The soldierly traditions of the Rathors were nobly upheld by the late veteran Sir Partab Singh, Maharaja of Idar and thrice Regent of Jodhpur.

The Maharaja of Jaipur is the head of the Kachhwaha Chauhans The beautiful ruined city of Amber was once the capital of the State, but Jaipur has taken its place since 1728, when it was founded by the famous Maharaja Jai Singh who ruled from 1699 to 1744. No lesser place in history has been won by Maharaja Man Singh (1592-1615) who took Arakan, Orissa, and Assam, and held in succession the governments of Bengal and Bihar, the Deccan and Kabul, where he died.

The Maharao Raja of Bundi is the chief of the Hara Chauhan Sept, who, like the Kachhwahas, are *agnikula*, or "children of the fire-pit," on Mount Abu. His State is remote and is rarely visited but the late ruler had the honour of receiving Her Majesty Queen

[1] Aurangzeb, in spite of his orthodoxy, also married a Rajput princess. Of the twelve Mughal Rulers who succeeded Akbar, six had Hindu mothers.

Mary in 1912. The royal durbar dress is most picturesque, and is distinguished by a wide pleated skirt. A sister State is Kotah, which separated from Bundi in 1572. From 1771 to 1824 the reins of authority in Kotah were in the hands of the Regent Zalim Singh, the blind Machiavelli of Rajputana, who during his long life of fourscore years could always say "my secret is my own."

Such are some of the Rajput States ruled by Rajputs. They are among the most enlightened, as they are the most chivalrous of the princes of India. The British have had no firmer friends. The State troops rendered yeoman service during both Great Wars, side by side with the Rajput regiments of the Indian Army. *Fais ce que dois advienne que pourra* has been the Rajput motto throughout the ages.

Besides the Rajput Rulers who have remained Hindu, the Sikh Maharaja of Patiala traces his descent from an ancestor of the dynasty of Jaisalmer.

THE PARSIS

THE Parsis, formerly inhabitants of Persia, are followers of Zoroaster (say 589-539 B.C.), and form a numerous and influential portion of the population of Surat and Bombay. Their chronology dates from 10th June 632 A.D. The Parsi year 1316 corresponds to 1947 A.D.

When the Sassanide Empire was destroyed by the Muslims in 651 A.D. the Zoroastrians were persecuted, and some of them fled (c. 717) to India—first to Diu, in Kathiawar, then to Sanjan, about 25 m. S. of Damao, where the ruler of Gujarat became their protector, and for some hundreds of years they lived there and in the neighbourhood in peace and quiet, finally making Navsari their headquarters. In the 16th century they suffered considerably from Muslim persecution until the time of the British occupation. The sacred fire, which Zoroaster was said to have brought from heaven, is kept burning in consecrated spots, and temples are built over subterranean fires. The priests tend the fires on the altars, chanting hymns and burning incense. They do not worship the sun or fire, as is often commonly supposed. "God, according to Parsi faith, is the emblem of glory, refulgence, and light, and in this view a Parsi while engaged in prayer is directed to stand before the fire, or to direct his face towards the sun, as the most proper symbols of the Almighty." There are fire-temples in Bombay for public worship. The Dasturs are their high priests. A partially successful attempt was made in 1852 to restore the creed of Zoroaster, the Zend Avesta, corrupted by Hindu practices, to its original purity. In order not to pollute the elements, which they adore, the Parsis neither burn nor bury their dead, but expose their corpses to be devoured by birds (see "Towers of Silence,"[1] Bombay, p. 23). They have been quick to adopt Western ideas, while

[1] The vernacular name of these structures is Dokhma.

in many respects maintaining scrupulously their own manners and customs. This has been noticeable in the matter of education, especially female education, and this, coupled with social freedom, has given Parsi ladies in the past an advantage The Parsis were the first to take up cricket They largely follow commercial pursuits, in which they are most enterprising and successful Their charity is well known. Benevolence is their first principle, but it is not restricted to their own community

PARSI FESTIVALS

Pateti, New Year's Day the 1st of Farvardin (approx September) The Parsis rise earlier than usual, put on new clothes, and pray at the fire-temples They then visit their friends and join hands, distribute alms, and give clothes to servants and others This day is celebrated in honour of the accession of Yezdajird to the throne of Persia, 632 A D

Farvardin-Jasan, on the 10th of Farvardin on which ceremonies are performed in honour of the dead, called Farohars, or "protectors." There are eleven other Jasans in honour of various angels

Khurdad-sal, on the 6th Farvardin, the birthday of Zoroaster, who is said to have been born 589 B.C at the city of Rai, or Ragha, near Teheran, but the date has not been authentically fixed

Jamshidi-Nauroz, held on the 21st of Mihr (21st March in 1937) It dates from the time of Jamshid, and the Parsis ought to commence their New Year from it

Zartoshte Diso, held on the 11th of Deh (approx June) in remembrance of the death of Zartasht, or Zoroaster, in Bactria

The Muktad, held on the last ten days of the Zoroastrian year (Sept.-Aug.), including the last five days of the last month and the five intercalary days called the *Gatha Gahambars* A clean place in the house is adorned with fruits and flowers, and silver or brass vessels filled with water are placed there, and ceremonies are performed in honour of the souls of the dead

THE 'SCHEDULED CASTES'

These, formerly 'Untouchables' or 'Depressed Classes' must be distinguished from tribes living in excluded areas and for whom certain Governors have a special responsibility They permeate every part of India, including Indian States They may include aborigines who were conquered by Aryan invaders of Ancient India, and were condemned to such work as the leather trade and scavenging The leather worker, indeed, despises the scavenger, but the scavenger is a necessity and is not necessarily badly off, especially if employed by the well-to-do, whose surplus food he can enjoy Many among these classes might in

a Western country take high places in a community, and rumour attributes considerable means to some. In the South, where they may be cultivators, their presence within a range of forty yards is a pollution to a high-caste Hindu. They are denied access to temples (except in the Travancore State), to schools, wells and even burning ghats—in fact, are usually buried. An untouchable manager of a school committee may have to take part in meetings from outside a window.

The number of these "castes" placed first in the census returns at the census of 1941 was 40 millions Political considerations, based on communal or proportional representation, should make "Other Hindus" inclined to their inclusion, but caste is too strong. In consequence mass adhesion to Christianity, Islam or Sikhism has been mooted. The late M K Gandhi espoused their cause in his newspaper "Harijan" (Outcast), but Hinduism gave him little support. In order to give them adequate representation in the Legislatures the British Government in 1932 reserved a large number of seats for these classes, but Mr. Gandhi resolved to "Fast unto death" rather than admit this principle. Hindu leaders took alarm and a "Poona Pact" quickly followed, under which the number of seats was considerably increased, provided that both voted in joint elections, the "untouchable" candidates being selected by a form of primary election.

There is still talk of mass conversion, but adhesion to Christianity might be regarded as a betrayal of Hindu culture and Indian nationalism, while the Christian Churches have no desire to acquire a large number of adherents for political purposes

BUDDHISM AND THE BUDDHISTS

Outside the Bengal district of Darjeeling and Kashmir, only in Burma and Ceylon will the visitor come across Buddhism. Tibet, of course, is Buddhist The Dalai Lama died in 1933, and his child successor was discovered only in 1939. The Pali Text Society is doing much for the elucidation of Buddhism by publishing original Pali works and some translations

Buddhism is too vast a subject to be treated exhaustively in a few pages, but some notice of so widespread a religion is required

Siddhartha Gautama, afterwards called Buddha (the Enlightened), or Sakyamuni, the sage of the Sakyas, belonged to the Kshatriya or warrior caste, and was the son of Suddhodana, ruler of the Sakya clan, settled around Kapilavastu, in the Nepalese Tarai, N of the Basti district of the United Provinces. The Mahabodhi Society of India accepts the year 624 B.C. for his birth at the Lumbini garden, the modern Rummindei, near Kapilavastu, and 544 B.C as the year of his death

The story of his life is contained in the sacred literature of the

Buddhists, undoubtedly based on truth, though enveloped in a mass of legend. The sacred literature means the Pali Canon called the "Three Pitakas, or Baskets," besides subsequent commentaries. It contains the alleged genuine sayings of the Buddha and the moral and religious principles of Buddhism. Among the works in the Canon are the Sutras (or Suttas), the dialogues, the Dhammapada, the Jatakas, the Buddhist psychology, etc Pali (the "Text") was a literary version of an Aryan dialect, later than the Vedas, earlier than classical Sanskrit. It had ceased to be a vernacular, but was the religious literature of Ceylon, Siam, and Burma, written on talipot palm-leaves (say 595 B C)

At the age of twenty-nine Gautama made "the great renunciation" of the world and its pleasures Much troubled by the spectacle of human suffering—age, disease, and death—and impressed by the sight of a peaceful saint, he decided to leave his happy home, his loved wife, and his lately born child, and surrender himself to the search of mental peace Cutting off his long hair and changing his princely raiment, Gautama left the palace suddenly and secretly in ragged garments As a disciple of two celebrated Brahman sages, he strove to content himself with their teaching and severe self-mortification; the strict austerities he practised produced no peace of mind or divine enlightenment—only great bodily weakness and a conviction of their inutility So he abandoned penances, and sat in meditation under the Bo-tree, the "tree of knowledge," at Buddh Gaya, where he was tempted by Mara, the personification of carnal desire, to return to the world, but he resisted, and became the Buddha—the Enlightened

At Benares, he preached his first sermon on "The Foundation of the Kingdom of Righteousness" (Dharmachakra Prawartana) commemorated by the Dhamek Stupa at Sarnath, and devoted his life to teaching In the kingdom of Magadha (now Bihar), where he travelled, he was received with great reverence and hospitality by all classes Sometimes the King, or another wealthy donor, would build a residence for the Teacher. His disciples formed, under rules framed by the Master, the community of mendicants (Bhikshus) from which the great monastic organisation, called the *Sangha*, was developed Places such as Lumbini and Buddh Gaya and his temporary residences became sacred spots. At nearly eighty he died at Kusinagara, modern Kasia, in Gorakhpur District. The cremation of his body was conducted with pomp, as for a King, and his ashes were divided, as precious relics, among the chief peoples to whom he had preached Some of these have been discovered at Peshawar (p. 376) and at Pipráwá (p 405). At his death Buddhism was the reformed religion of a sect, prevalent within the limited area of his preaching, it was maintained by the organisation of the *Sangha* until the day of its expansion dawned

Only a summary of the philosophical doctrines of Buddhism can

be attempted here. But some knowledge of its character as a religion is essential for an understanding of a great period of ancient India.

In the Buddhist religion the personality of the Buddha is predominant. No Supreme God is admitted in the system. The Buddha, as the teacher of the truth, and therefore the guide and saviour, is the central object of faith and devotion. By his doctrine the work of salvation is limited to human agency—that is, the human mind can achieve omniscience, and human nature arrive at absolute perfection; its purpose was to lead men to a higher life. Human and animal happiness were its avowed object as a practical religion. It had a kindly spirit, and a central tenet is to keep to the "middle path" between worldliness and asceticism. Buddha, it is believed, taught that all life is suffering, that suffering arises from indulgence in desires, especially the longing for continuity of life, and that the only hope of relief lies in the suppression of sensual passions and every attachment, in Nirvana, the highest bliss—meaning, not the extinction or negation of being, but the extinction, the absence, of passionate desire, the goal by which union with the perfect good is obtained. Ignorance, delusion, and anger also are fundamental evils and hindrances that must be completely destroyed by intense and continuous mental discipline. Each man must depend on himself and his own efforts towards intellectual and spiritual clearness. Each man must purify his life, grasp the law of causes, perceive the sorrow of existence, the impermanence of all states, and cease to believe in any "soul" apart from the elements which make up the individual and are dissolved at his death. Rewards and punishments, strictly speaking, do not come into the creed, but the inexorable working of cause and effect proceeds without a break, and thus good and evil done in one life bear fruit in the next. The connection between the lives is not the transmigration of a soul but the *Karma* (action), the force that passes on and causes the newly assembled elements of existence to form a new being living on earth or in one of the heavens or hells according to the acts and intentions of a former life, for those constitute the individual's *Karma*. A man's object should be to hear somewhere, at some time, the teaching of a Buddha and become enlightened by meditation and introspection, so as to earn a cessation of the cycle of lives through which he would otherwise be destined to pass, and thus finally to reach Nirvana, the sinless, calm state of mind in which there is no renewed individual existence. Thus the final death, with no new life to follow—as there is no soul which continues to exist after death—is a result of Nirvana, but it is not Nirvana. All men are capable of attaining Nirvana, without distinction of caste, and neither sacrifices nor bodily mortifications are of any avail. To attain salvation by obtaining freedom from delusions, the Buddhist must follow the eightfold path and pass through four stages of higher and higher saintliness. This, the Noble Path, is the

very pith of Buddhism, by which alone the Buddhist can reach *Arhat*, the state of salvation, the state of a man made perfect. The Buddha himself is believed to have passed through a great number of existences in the course of the preparation for his final mission. The legends of these lives of Gautama are the famous *Jataka* tales which have formed the subjects of many ancient sculptures, paintings, and literary works of Buddhist countries

The principal virtues inculcated by Buddhism are charity, compassion, truthfulness, chastity, respect for the *Sangha*, and self-restraint in regard to all the ambitions, pleasures, and attachments of life The stricter code—the ten precepts—is binding on the religious order only the first five precepts are binding on the laity They are practical rules forbidding (1) the destruction of life in any form, (2) theft, (3) unchastity, (4) lying, (5) indulgence in intoxicating drinks, (6) eating at forbidden hours, (7) frequenting performances, (8) use of unguents and ornaments, (9) use of a large or ornamented couch, (10) accepting money

The Buddhist ideal is lofty, and has done much for Oriental civilisation wherever it has prevailed In practice the religion has been adapted to the needs of believers of many races, and prominence was given from early times to almsgiving and acts of piety, such as the building of shrines and monasteries Faith in, adoration of, and meditation on, the Buddha are of great efficacy Gautama is said to have been preceded by three "Dhyani" Buddhas, and a future Buddha, Maitreya, is looked for The more austere Hinayana ideas of *arhatship* (saintliness) and *Nirvana* (cessation of sorrow by destruction of craving) developed into the glowing conceptions of Mahayana Buddhists multiplying Buddhas and Bodhisattwas (predestined Buddhas), and carrying the notion of *Nirvana* far beyond *arhatship* The Tashi Lama of Tibet is believed to be the manifestation of Gautama, the Dalai Lama of a Bodhisattwa

Buddha is generally represented in one of three attitudes—he sits cross-legged, either with both hands raised in the preaching posture, or with his hands in contact in an attitude of profound meditation, or with one hand pointing to the earth (see Plate 2 on p lv).

BUDDHIST FESTIVALS

The new Year Festival corresponds to the Makar-Sankranti of the Hindus (see p. lvi), but in Burma it often takes place as late as May At a given moment, which is ascertained by the astrologers of Mandalay, a cannon is fired off, announcing the descent of the King of the Naths (genii) upon earth. Then begin the Saturnalia (Thingyan), during which the traveller by train may expect to receive a wetting while pots of water are thrown about.

The last birth of Gautama is celebrated at the end of April by the

worship of his images, followed by processions In Ceylon the legendary coming of the Buddha to the island is celebrated by a festival in March or April, when the pilgrims visit either his footprint on Adam's Peak or the sacred Bo-tree at Anuradhapura

THE JAINS

THE founder was Vardhamāna, commonly known by his title of Mahavira, and designated Nataputta by the rival order of Buddhists. Mahavira was born probably about 599 B C to Raja Siddhartha, head of the Nata clan of Kshatriyas, settled at Vaisali (the modern Basarh), about 27 m. N. of Patna His mother was Trisala, a King's daughter. At thirty he adopted a spiritual career and became a monk of the Parsvanatha order. After twelve years his divine mission was recognised ; he was entitled Mahavira (Great Hero) and acknowledged to be a Jina (spiritual conqueror), from which the system Jainism and sect Jain are derived In the Jain hierarchy Parsvanatha was Mahavira's immediate predecessor , from him the sacred hill Parasnath, in the Hazaribagh district, has its name Mahavira taught his religious system and organised asceticism for thirty years, chiefly in Bihar, in the same area as Gautama Buddha, without conflicting. He died probably in 527 B.C at Pawa, in the Patna district (These are the traditional dates the *Cambridge History of India*, vol 1, p. 697, gives 540-468 B.C)

Jainism is a monastic organisation—not strictly a religion. The Jains acknowledged caste, and the Brahmans as priests , their monastic order included four classes—monks, nuns (Svetambaras only), lay-brothers, and lay-sisters. Through this lay element Jainism survived in its monastic settlements and lay communities when Buddhism disappeared The Svetambaras collected and preserved their sacred books in a Council at Pataliputra, the modern Patna, about 310 B C , a subsequent Council at Valabhi, in Gujarat, made a revised edition In 70 or 82 A D. a schism took place between the Svetambaras (white-clad or yellow-robed) and Digambaras (sky-clad or naked)

The chronicling spirit is strong in the Jains, who maintain lists of the succession of teachers Ancient Jain stupas and inscriptions have been discovered. The object being to obtain liberation from the bonds of transmigration, the only remedy lies in an abnegation of the world. Thus is their attainment of Nirvana (liberation from any further re-birth) to be obtained in life, not after death, by the principles of Right Faith, Right Cognition, Right Conduct. Right Faith is absolute reliance on their founder as *the* Tirthankara, or pathmaker, to Nirvana. There were twenty-four Tirthankaras, from the first, Adinath, to the last three, Neminath, Parsvanatha and Mahavira. Each is known by a symbol (see p. 186). Right Cognition means

the correct understanding of the Jain theory of the world, which assigns a soul to every individual person or thing Right Conduct is summed up in five great vows, which include their regard for the minutest creatures of animal life as possessing souls Priests therefore wear gauze respirators to prevent involuntary inhalation

Only monks can attain Nirvana, nuns cannot, nor can lay adherents for whom the vows are relaxed Jainism has developed by the introduction of a religious cult into their essentially atheistic system. The building of temples and other religious features are excrescences on the pure Jain system, due to the admission of the lay element The Jains chiefly reside in the trade centres of W India and in Calcutta, especially "Marwaris" from the Bikaner State, very wealthy Their most famous shrines are at the hill of Parasnath (p 58) Satrunjaya, near Palitana, in Kathiawar (p 230), and Mount Abu (p. 207) They maintain pinjrapols, or hospitals, for all decrepit animals They are very charitable

CHRISTIANITY

The spread of Christianity in India,[1] Burma and Ceylon is a matter of deep interest, upon which full details will be found in the annual reports of the various Missionary Societies at work in these countries. The census returns of 1941 give the numbers as six millions with no increase since 1931 Indians predominate, especially in the South Anglican Societies send out priests to many places all over India, serving sometimes several stations

The Anglican Church is disestablished by the India Church Act and Measure (1927) There are Indian Bishops for example at Dornakal Other denominations are amalgamated into the South India United Church and the United Church of India (North), both belonging to the Presbyterian Alliance (1875) The Roman Catholics are the most numerous, served by Jesuit Fathers (who, as usual, are learned men of scientific activities) and by other orders with a considerable hierarchy The Salvation Army works mainly in the Punjab since 1882 (a "Criminal Tribes" colony at Shantinagar is a success) and in Travancore State. There are Jacobite-Syrians almost entirely in Travancore State, and Romo-Syrians chiefly in the Cochin and Travancore States

Most of the Indian Christians have come from the Scheduled Castes and from aboriginal races The movement towards Christianity

[1] St Francisco de Xavier (1506-52) began missionary work in India in 1542 at Goa, and among the Paravas, the pearl-fishermen. His course lay through Travancore, Ceylon, Mailapur, Malacca, the Malay Archipelago, India and Malacca again, Japan, Goa, Singapore, he died on the Chinese coast of Kwangtung, and was eventually buried at Goa The first Protestant missionaries were the Lutherans at Tranquebar in 1706, the Baptists at Serampore in 1793, and the Anglican Church in 1813 (Chap IX. of Sir W W. Hunter's *Indian Empire*, W. H. Allen & Co., 1893, gives a good account of the spread of Christianity in India.)

among these classes has been mainly due to social causes; and two results have been the education of their children and their uplift from degradation. The main centres of this work have been (1) in *Northern India*—the Chenab Colony in the Punjab, the Central Provinces, Chota Nagpur, and the Khasi Hills in Assam: and (2) in *Southern India*—the Telugu Country in the north of the Madras Presidency, the Tinnevelly district in the south, and the States of Travancore and Cochin. Moreover, a body of Indian public opinion has been created in favour of treating the Scheduled Castes as fellow human beings.

In the case of the higher grades of Indian society, the number of Indian Christians is comparatively small, but these have exercised a much greater influence over the educated classes of the community than their number would suggest. At the same time the study of Christian teaching has had a reflex action on the higher classes Christianity in the East is not now reliant on Western influence, the value of the work done in the Mission colleges and schools is immense. The spread of the ethical and philanthropic ideals of Christianity also operates largely through medical missions, whose hospitals and dispensaries have had an important influence on many classes Mission schools have done pioneer work in the matter of female education

INDIAN ART

Indian Art is a manifestation of religious emotion, and essentially part of the life of the people, not, however, to be classified entirely by creeds, but also by periods and by geographical and racial conditions. Its tradition is a great heritage of the Indian peoples.

Authentic history begins with the Mauryan Emperor Asoka, who raised Buddhism to the position of a State religion His monolithic columns show in design and technique the influence of a Persepolitan culture, the forms of which are easily distinguished. But if Indian artists borrowed they were quick to mark it with their own individuality under Vedic influence. In the north-west, in the country known as Gandhara, a "Graeco-Buddhist" art flourished in the first centuries of the Christian era. This influence does not appear to have greatly affected the South, where a higher form of art was fully developed The caves of Ajanta contain mural paintings dating after this period and are generally regarded as the crowning glory of Buddhist art in India. They have been conserved with scholarly care by the Hyderabad Government.

With the revival of Brahmanism in the fourth century A.D., the art becomes more purely Indian in intention, and under the Imperial Guptas (455-606) it assumed a rich and varied character. After the decline of this dynasty the style continued, but with the Muslim conquest new ideas were introduced, which influenced art in Northern

India, and wherever the Faith penetrated, but had little effect on the South. There were two styles of miniature painting, that of the Mughals, starting with Islamic subjects but proceeding to portraiture, and the Rajput school, Hindu in intention. Both declined with the decay of the Mughal power.

Under the British rule the arts have been fostered by Government Schools of Art, established in provincial capitals, and which, besides giving instruction in painting and sculpture, have resuscitated certain art crafts and have created others in demand owing to changed conditions. Indian artists were employed in decoration of buildings in the New Capital at Delhi, and at India House in Aldwych, London, where their work can be admired. An Exhibition of Modern Indian Art was held at the New Burlington Galleries in London in 1934 and excited widespread interest. In India such exhibitions are held at the chief centres during the cold weather.[1]

In the field of the applied arts, metal work, carving, jewellery and embroidery, the Indian artisan undoubtedly possesses an artistic sense of colour and form. Much of his skill is due to the hereditary nature of his occupation. The potter, the carpenter, the smith, the weaver each belongs to a separate caste; a son follows his father's trade, and custom impels him to imitation, so that he has little creative power, and the workmanship is almost exactly that of some thousands of years ago. There is, however, a tendency to imitate European methods, and, if employed in manufacture, the artisan can perform feats which would surprise the Western workman, with all his machine tools and limit gauges.

The best work used to be done at leisure to the order of wealthy princes and nobles. The authority of trade guilds and of caste has been relaxed and the importation of certain goods has affected certain crafts. The armourer's trade ("Damascus" blades were made of Indian steel) has been diverted to curios, cheap cotton goods have restricted the production of fine muslins, and brilliant aniline dyes have to some extent displaced the permanent but somewhat sombre vegetable dyes.

Nearly every village has its potter, for in many households no earthen vessels can be used a second time. The forms of the utensils made by him are of great antiquity. The best glazed pottery is made in the Punjab (blue and white) and in Sind (of turquoise blue) under a transparent glaze, the usual ornament being a conventional flower pattern. The Madura (p. 661) pottery deserves mention for elegance of form and richness of colour. In the Punjab and Sind (Tatta and Hyderabad) there are good specimens of encaustic tiles on old Muslim

[1] See *Arts and Crafts of India and Ceylon* by A. K. Coomaraswamy (T. N. Foulis, Edinburgh, 1913), *Indian Painting*, by Percy Brown (Oxford, 1927), and *Ideals of Indian Art*, by E. B. Havell (Murray, 1928).

mosques and tombs, such as the Mosque of Wazir Khan at Lahore (p. 357).

Metal work is now confined to utilitarian purposes or personal ornament instead of military arms. The Punjab has long produced gold and silver work, and especially parcel-gilt surahis or water vessels of elegant shape and delicate tracery. Kashmir, Cutch, Lucknow, Bombay, and Cuttack (filigree) all produce gold and silver ware, while Tanjore makes silver work on brass and copper. The Cutch hammered repoussé work is of Dutch origin. The embossed silver work of Madras, with Dravidian figures in high relief, is called Swami ware. Bidri work of silver and gold inlaid on iron has been revived at the Government Industrial School at Bidar (p. 548).

Domestic utensils in brass and copper (Hindus using the former and Muslims the latter) are made all over India. The copper bazaar at Bombay is celebrated. Moradabad (p. 416) produces brass and lacquered ware, Benares and Jaipur mythological images and emblems. Burdwan (p. 66) and Midnapore (p. 493) fabricate kansa, which is bell metal. Nagpur, Ahmadabad, Nasik, Poona, and Murshidabad are noted for brass and copper ware, which in Kashmir and at Peshawar has Persian features. Nepalese brass work includes lamps, incense-burners and bells.

The artisans of India were in early times skilful in the use of iron and steel. The iron pillar in the Qutb Mosque at Delhi may be assigned to A.D. 400, and is of a weight which could not have been forged in Europe until a much later date, while it is of great purity and unrusted (p. 309). It is probable that it came from Orissa, where other examples can be seen, and where there are literally mountains of iron ore.

In the enamelling of Jaipur—the best in India—the colours are placed in depressions hollowed out of the metal and are made to adhere by fire. Jaipur is particularly famous for a fiery red (pigeon's blood). For enamel on gold Delhi may be mentioned, on silver Lahore, Kangra and Multan, several places in Sind, Bhuj in Cutch and Kashmir, on copper the Punjab and Kashmir. A green secret quasi-enamel is made at Partabgarh (p. 421) and in blue at Ratlam (p. 151). Glass was known in India at the time of the Mahabharata, and bangles are made all over the country in enormous numbers. Ganges water flasks come from Sawansa in Partabgarh District. Alwar produces engraved gold and silver plate and book-binding.

In jewellery a variety of brilliant colours is produced by the free use of small scales of gems, otherwise valueless. It is worn all over the visible person. Gold jewellery may well have emanated in the South where the Mysore mines are worked to-day. Silver filigree work is an art of very ancient origin, and at Cuttack, Dacca and in Ceylon usually

has a leaf design. Silver fish, flexible-jointed, are made in the Monghyr District (p. 462). Each article of Bhutan jewellery is a work of art. Enamelled pieces come from places already named and from Hyderabad in the Deccan. The old Delhi work in cut and gem-encrusted jade is highly prized. The pietra dura inlaid work of Agra is supposed to have been introduced by Austin of Bordeaux.

The black wood-carving of Bombay, in large pieces, and of Ahmadabad, in more portable objects, is in a style derived from the Portuguese. Sandalwood may be enriched with marquetry (all the way down the West Coast and in Mysore), or ebony (at Nagina and Bijnor) or ivory (at Delhi, Benares, Vizagapatam and Amritsar) Ivory carving is carried on in Sylhet (fans), at Ratlam (bracelets) and Vizagapatam (boxes, with stag's horn interposed) The Trivandrum School of Arts in Travancore makes a specialty of ivory carving White marble figures of gods and animals are carved all over Rajputana, where this stone is found, and at Fatehpur-Sikri models are made in soapstone Models in clay of fruit and figures are made at Lucknow, Poona, Krishnagar and in the Punjab.

Weaving was first perfected in India but embroidery came in with the Muslims The Greek name for cotton fabric, sindon,[1] is etymologically the same as India (Sind) The word chintz is derived from the Hindu chhinta (variegated), while calico is derived from the place of its production, Calicut (p 630) Dacca muslin (the name is derived from Mosul) had names which suggests its airiness Indian cottons have every quality except cheapness, but efforts are being made to popularise them in spite of this handicap The mills, which used to confine themselves to the short-stapled cotton, now turn again to the long-stapled product, even importing from America Pure silk fabrics are made at Lahore Agra, Benares Hyderabad (Deccan) and Tanjore Gold and silver brocaded silks (kincobs from the word kimkhwab connected with the Chinese kin gold) are declining being out of Indian fashion, but Surat produces printed silks, worn by Parsi ladies with charming effect Bahawalpur (p 396) is noted for damasked silks The industry is reviving in Bengal and elsewhere Gold and silver wire is drawn out with great skill, two shillings worth of silver drawing out to 800 yards The best embroidery comes from the North, much tinsel being used but without a tinselly appearance The shawls of Kashmir were celebrated, chiefly because of the annual presentation by the State to the late Queen-Empress Victoria they are made since 1843 from the finest wool of the Himalayan goat, at Amritsar, but aniline dyes have not improved them Patu is a woollen material made in the North, for example at the Egerton Woollen Mills, Dhariwal in lengths for suitings, rough or smooth. The Rampur chadar is a

[1] The fine cambric over-shirt worn by H M the King at his Coronation is called Colubium Sindonis.

shawl, made at Amritsar and Ludhiana of Rampur (Kangra) wool (pashmina).

In the carpets, made at many places, the intrinsic difference between Eastern and Western decorative art is shown in the flowing classical "line of beauty" and in the "tree of life" borrowed from Persia. The carpet has literature of its own Cotton rugs can be obtained by special order, but the dari or shatranji striped floor-covering is common all over India for bedding wraps or tent floors, and has the advantage of immunity from insects Central Asia carpets come in by caravan and are best purchased near the point of entry, Peshawar or Quetta, but many go through to Amritsar A common design includes the filpai, the elephant's foot. The jainmaz rug represents a slab in a mosque floor

For historical details may be consulted *A History of Fine Art in India and Ceylon*, by V A Smith (Second Edition, revised by K de B Codrington, Oxford University Press, 1930) The Royal India Society arranges lectures, published in its illustrated Journal, *Indian Art and Letters*

CURIOS

Antique pieces may still conceivably be found, but the best course is to go to a reputable dealer and to be prepared to pay a fair price, unless one is possessed of considerable knowledge attained by study in museums and of the best books The assistance of a friend with expert knowledge is invaluable Special caution should be exercised in the purchase of Oriental paintings and porcelain One must not forget the maxim *caveat emptor* and must realise that in bargaining the final figure will always leave the small dealer with a margin of profit, which may be considerable

(5) HISTORY AND ARCHITECTURE

ANCIENT INDIA

INDIANS are proud of their ancient civilisation. In this historical sketch, designed to link up for the benefit of the visitor or ordinary resident what may be familiar to the scholar, it is impossible to examine at any length the painstaking research which has been carried on to the stage of present knowledge The Archaeological Departments of the Government of India and of some of the Indian States are tireless, although hampered from time to time by want of funds The forces of nature have destroyed some evidence, or covered it up in the shifting beds of great rivers, while man has built over old sites for many centuries. The dates may be approximate, but will save some calculation. Close dates can be assigned to some of the great men,

but the dates of many ancient monuments must be inferred from the architectural features to which some space must be devoted.

To the most ancient "Chalcolithic" sites at Harappa, Mohenjodharo and others, approximate dates prior to 2000 B.C. have been assigned. The "Indus civilisation" was of a high order, higher, indeed, than is found in many modern towns of equal size in India in spite of efforts to improve social services. It is difficult to cope with an increase of population of five million a year. This civilisation has been discovered in the Ambala District near Rupar (p. 334), and Maski near Raichur (p. 529). The latest discovery was made at Maheshwar in the Nerbudda Valley. At Taxila also (p. 309) the earliest of the three cities was first occupied before 2000 B.C. The early civilisation was first disclosed by the efforts of Sir John Marshall Director-General of Archaeology from 1902 to 1928 and his assistants N. G. Majumdar (murdered 1938) and Dr. Ernest Mackay.

The settlement in North India of the "Aryans" whose social development developed into Hinduism took place between 2000 to 900 B.C.

CHRONOLOGY

1000–1200 B.C. Rigveda.

518 B.C. N.W. India added to Persian Empire.
500 ,, Extension by Bimbisara of Magadha Kingdom.
326 Alexander the Great enters N.W. India.
321 Mauryan Empire. Chandragupta (Sandrakottos, receives Punjab, 317.
262 Conversion of Asoka (273–232) to Buddhism.
202 ,, Andhras in Upper Godavari Valley.
184 Sunga dynasty at Avanti (Ujjain) 70.
170 ,, Sirkap (Taxila) built by Eucratides (Bactria).
80 ,, Sakas take Taxila.
70 Andhras in Malwa and Bundelkhand- to 80 A.D.
58 Sakas (Scythians) occupy Punjab, Vikrama era of Azes.
44 ,, Parthians in Punjab.
62 A.D. Kushans take Taxila (Sirkap).
78 (or 125) A.D. (Saka era) Kanishka founds Sirsukh (Taxila).
225 A.D. End of Kushan Empire.
319 ,, Era of Chandragupta II (Imperial Guptas 455).
430 ,, "Little" Kushans, followed by "White Huns" 450.
455 ,, Later Guptas, –606.
510 ,, Mihirakula (Hun) in Punjab, Gujarat and Malwa, –534.
550 ,, Chalukyas (Badami), –753.
606 ,, Harsha (Thanesar), –647; capital Kanauj.

629 A.D Hiuen Tsang in India, –645.
711 ,, Muslim invasion from Arabia.
753 ,, Rashtrakutas conquer Chalukyas, –972
788 ,, Shankar Acharya (Sringeri, Dwarka, Badrinath, Puri)
973 ,, (Second) Chalukyas conquer Rashtrakutas, –1190.
1190 ,, Hoysalas in Mysore (Halebid), –1326

The earliest colonies were in the Punjab and in the valleys of the Jumna and the Ganges When the work ascribed to Manu assumed its present shape, the whole space between the Himalayas and the Vindhya range north of the Narbada river was acknowledged to be Aryan territory. The Dravidian South has remained mainly aboriginal, but has been absorbed into the Hindu pale Indraprastha (Indrapat, p. 302, now on the edge of the new capital at Delhi, is a traditional site) was founded about 1500 B C Karnal and Thanesar (p 322) are supposed to be equally ancient Muttra was founded before 600 B C., Valabhipur (p 229) and Ajodhya (p 422) are other very important ancient cities

The Punjab and Sind formed part of the Persian Empire of Darius (521–486 B C) The boundary probably ran up the Indus from its mouth, then along the Sutlej, and then along the Beas (Hyphasis). The province is said to have been rich at that time, but became arid until restored to prosperity by British irrigation canals Darius probably visited this outlying satrapy about 518 B C At Bhita, near Allahabad (p 51), a cross-section of the remains covers a period from long before 321 B C In the Nepal Terai, north of Gorakhpur (p 465), Siddharta Gautama the Buddha was born about 624 B.C., and Mahavira, the founder of the Jain sect, was born a little north of Patna in 599 B C

The kingdom of Magadha, which developed into the Mauryan Empire (321–184 B C), was started by Saisunaga in the Bareilly District It was expanded about 550 B C by the addition of Monghyr and Bhagalpur by Bimbisara (582–554 B C) with a capital at Rajagriha (p 65). His successor, Chandragupta, added Benares, Oudh and Northern Bihar, probably also Orissa on the east coast When Alexander the Great came to India to consolidate his hold on the Persian Empire in 326 B C., the King of Taxila met him in the Kabul river valley Alexander himself crossed the mountains north of the river and proceeded to Aornos, a place identified by Sir Aurel Stein some twenty miles north of the confluence of the Kabul river with the Indus, which Alexander crossed at Hund A second division traversed the Khyber Pass, or one of the other passes close by, into the Peshawar vale Resistance was met on the Jhelum river, where Alexander defeated Porus (Paurava) near the battlefield of Chilianwala (p 363). At the Beas River (Hyphasis) his troops refused to proceed farther, perhaps because here they had reached the boundary of the Persian Empire. He

proceeded down the Sutlej and the Indus, which then may have taken a course nearer the hills by the Manchhar Lake (p. 406), since Jacobabad (p. 408) is now below the bed of the Indus Sending his fleet along the shores of the Persian Gulf, he marched to Kandahar by the Bolan Pass (p 408), a journey of great hardship, experienced by British armies also in 1838 and 1878, in crossing the waterless desert between Jacobabad and Sibi

The Mauryan Chandragupta became stronger A successor to Alexander, Seleucus Nicator, about 305 B C , desisted from attack and made a treaty handing over charge of the Indian Province Kandahar, Kabul, and parts of Baluchistan He sent an envoy to the court of Chandragupta at Patna, then above the confluence of the Son and the Ganges The Memoirs of Megasthenes recorded the shifting of the beds of the great rivers, and the primitive nature of the dwellings, only those on high ground being made of materials more substantial than "wattle and daub" The country then must have been well afforested The melting of the Himalayan snows and the monsoon rains cause the rivers to overflow wide beds in which they meander during the cold season British engineers have developed a technique by which the rivers are held to their courses at the great railway bridges, but in between houses and lands are still swept away

Chandragupta's empire extended to the Narbada river on the south On his abdication Bindusara (297–274 B C) subdued the Deccan probably up to the Krishna river, which afterwards formed a boundary between Muslims and the Hindu South for some centuries Asoka succeeded, and the extent of his influence is shown by an edict at Jonnagiri (Yaraguda) in the Kurnool District, and another at Siddapura, in the Chitaldrug District of Mysore (p 585) , beyond (much later) were Dravidian kingdoms, Cheras at Karur (p. 629), Pallavas Cholas, and Pandyas Traditionally Srinagar (p 386) was founded by him, and he is supposed to have visited Sravana Belgola (p. 588) in Mysore

BUDDHIST INDIA

In 262 B C Asoka was converted to Buddhism Now began the erection of stupas and pillars, and the decoration of caves by carving which was carried on by Buddhists, Jains, and Hindus Brahmanism was latent but became generally accepted about A.D 700, and Jainism was practised as an undercurrent Asoka sent missions into China and to the West, even to Epirus, but outside India Buddhism was widely accepted only in the East, from which Chinese pilgrims came to visit India, for example Hiuen Tsang in A D 629–645, to record facts of interest even if they sometimes perplex According to Ceylon tradition a successful Buddhist mission was headed by Asoka's brother.

About this time, it may be supposed, the simplest houses, like those in Bengal to-day, consisted of bamboo screens interwoven with palm or other branches and possibly plastered with mud or, as in many parts of India to-day, of mud in mass or sun-dried mud bricks. No kiln-burnt bricks have been found which can be dated before 400 B C. except in the phenomenon of the "Indus Civilisation." Concrete floors, made of potsherds and lime, were used before 700 B C and lime mortar in Kashmir about 250 B C, but both were rare Roofs were flat or curved, if bamboos were used, the upper ends being lashed together and the lower ends tied and backed by the walls Framed timber followed Posts were set, as they still may be, in jars of earthenware to protect them from white ants This developed in stone in the Gupta age after A D 319, and the "pot and foliage" base was produced in carvings About 400 B C burnt brick, for which the sandy silt of the Ganges is well adapted, came into use, as at Bhita (p 51). This brick was laid in mud, the floors were of brick and plaster, ceilings were timbered, covered with reeds and a layer of mud plastered on the top, or if pitched (or curved) were tiled with finials of terra-cotta as illustrated by Cunningham (*Stupa of Bharhut*, Pl XXVI, 7) Brick in mud pillars were necessarily thicker than wooden pillars

Dressed stone appears first in the time of Asoka, in the lats or stone pillars which he caused to be erected and in a monolithic rail at Sarnath (p 98) These display a mastery over material never afterwards equalled by Indian masons, and which is not surpassed even in the marble work of the Parthenon This indicates that the Indian craftsmen worked under the direction of Asiatic Greeks, who may themselves have taken a hand. Every sanctified Buddhist locality was marked by the erection of a small brick stupa (tope), which, if it contained relics of the Buddha, was called a dagoba Such relics were contained in a casket just below the summit of the dagoba, called a tee (hti). The tee, at first a few stones in the form of a swastika, developed into a square or mushroom-shaped umbrella which, multiplied in tiers, became a spire in Burma The older memorial pillars were called stambha (or lat, if carved out of one stone) bearing emblems—such as lions or wheels (following "the path"). Sometimes the pillars became pedestals for lamps, or for vehicles of the Hindu gods Topes of Asoka's time are at Sanchi (p 162) and Sarnath (p. 98) Two examples of his pillars are at Delhi (pp. 299 and 300), but the Iron Pillar (p 307) is not one. The Barabar Caves at Gaya (p. 55) belong to this period Otherwise the monuments consist of the rock edicts in Brahmi found over an area of India not subsequently controlled by one ruler (except, possibly, Muhammad ibn Tughlaq and certainly Aurang Zito) before the British obtained paramountcy in 1849 over the Sikhs.

After Asoka's death, in 232 B C, the Mauryan Empire weakened, and the dynasty came to an end in 184 B C. with the slaying of

Brihadratha by Pushyamitra, founder of the Sunga dynasty and previously Viceroy of Ujjain. The dynasty lasted until 78 B.C. and gradually lost territory. The Greek successors of Alexander in Bactria warred between themselves, but in 206 B.C. Antiochus III received the submission of the Punjab, and about 170 B.C. the city of Sirkap at Taxila was founded. In 155 B.C. Menander had a capital at Sialkot (p. 361) and raided as far as Rupar on the Sutlej and to Karnal (p. 322) on the Jumna, 100 miles beyond the old Persian boundary. He is said to have advanced as far as Patna, but was recalled by trouble in Bactria. Before this, about 201 B.C. (when Scipio Africanus took Carthage), the Andhras (Telugus), occupying the east coast from the Godavari to the Krishna rivers, had extended their sway along the Godavari valley north-westwards until the second king, Krishna, reached Nasik. They established a capital at Paithan (p. 85). Through this place ran a road from the west coast, leading through Bhilsa (p. 167) to Patna, with a branch from Bhilsa to Saheth Maheth (p. 421). About 90 B.C. there were three powers—the Greeks, the Sungas, and the Andhras—who extended down to the Krishna river. The Besnagar pillar (p. 167) was erected by an envoy from the Greek king at Taxila about 90 B.C., the fourteenth year of Bhagabhadra, last but one of the Sungas, which dynasty ended in 70 B.C. After this the Andhras extended northwards and occupied Ujjain and possibly Patna, and to them some of the monuments at Sanchi (p. 102) may be attributed.

There were other smaller independent kingdoms. In 169 B.C. a king, Kharavela of Kalinga on the Mahanadi river, recorded his independence in an inscription in the Hatigumpha cave (p. 497) near Bhubaneshwar. In Sunga times Muttra was the capital of the Curacenas and Chitorgarh (p. 152) was in their territory. There were Panchalas in the Bareilly district, and always there were Dravidians south of the Krishna river.

The Greeks in Gandhara, from Kandahar to the North-West Punjab, did not outlast the Sungas. Sakas or Scythians had been pressed from Central Asia through Afghanistan and Baluchistan into Sind. About 75 B.C. they made their way northwards and conquered the Punjab, spreading down to Muttra, which passed under their rule after 50 B.C. Later they occupied Taxila and Peshawar (p. 376). Their rule in the North-West lasted until after A.D. 380, and some rulers of Western India were known as Satraps from A.D. 119–388.

The period of the Sungas (184–70 B.C.) and following centuries produced highly decorative work in stone. The important dagobas were enlarged and cased in stone. Thieves in search of the treasure caskets have destroyed the tees. The earliest caves, possibly the work of the Andhras, are not far from Bombay at Karli, Bhaja and Bedsa (p. 514), but at Ajanta (p. 67) some are contemporary, and others continue a succession until about A.D. 650 when Buddhism declined and Brahmanism took its place. At Ellora (p. 76) the Buddhist series

commenced later and continued later than at Ajanta, while Jain and Brahman caves are found. At Nasik (p 39) the Buddhist series may be dated 200–100 B.C. The caves at Kanheri (p. 30) near Bombay may have been made by exiled Buddhists between A D 200 to 950 or later.

In the earlier caves the few slender stone pillars were copied from timber, as were the timber walls, roofs, and gateways in every detail down to the nail heads Timber was still used, as at Karli, in addition to stone In the later caves pillars are heavy, being copied from brick in mud Assembly halls or temples were called *chaityas*, and monasteries *viharas* (see plans at pp. 78 and 514) Examples of both of these are near Bhilsa (p 167), but generally are to be found in caves cut out of hard basalt or trap rock, as at Ellora In spite of the labour necessary without modern explosives, Fergusson estimated in his *History of Indian and Eastern Architecture*, often quoted in this Handbook, that the cost was only one-tenth of that involved by quarrying, transporting, carving, and erection in a building In some caves external cutting and carving were confined to the entrances. Characteristic details of early Buddhist (Hinayana) sculpture are emblems—the wheels, trident, and swastika, or a pair of footprints—with patterns representing rails and horse-shoe windows, simple topes and sacred Bodhi (pipal) trees

The use of stone in sacred monuments during the Sunga or (later) Andhra period is particularly well illustrated by the railings of Bharhut (now in the Calcutta Museum, p 110), Buddh Gaya (p 57), and the gateways of Sanchi, placed at the cardinal points of the compass, in this order of development from timber models, a development which took quite a short space of time The Muttra school showed it also, but there it occurred at one place

Foreign influences in Indian architecture (according to some authorities) received a fresh stimulus under the Sakas (after 75 B C), and later under the Parthians and Kushans, when a Hellenistic school, known as Gandhāran, became established, about A D 200, on the North-West Frontier and was devoted to the service of Buddhism Other authorities consider that the art of painting was indigenous. The masonry at Sirkap (p 369) has a diaper pattern, layers of small stones or bricks filling interstices between massive blocks. Arches, pointed or rounded, were constructed by horizontal corbelling The Corinthian capital and the undulating garland are common motifs The Mahayana (greater vehicle doctrine), representing the figure of Buddha, outgrew the Hinayana (lesser vehicle), using symbols only. At Ajanta (p. 67) the paintings describe the jatakas or birth stories and other incidents of the life of the Buddha. They date from A.D. 150

The Mahayana formulated a pantheon, with Boddhisatvas, demons and imagery of all sorts. This had much in common with the later

Brahmanism, developing into the modern Hinduism. The tide of Hellenistic art affected the Muttra school and may have reached its high-water mark of progress at Amaravati (p 510), near Bezwada on the Krishna river. At Conjeeveram (p 617) the Hinayana form lasted until after A D 400.

The rule of the Sakas in Northern India gave place to that of the Kushans, possibly from A D 45 to 225, but the dates are most perplexing. Two great kings of this dynasty were Kanishka and his successor Huvishka Sakas or Parthians still ruled under them in Kathiawar and in Malwa (A D 200-388) In the Ganges basin a new kingdom was formed in Magadha and Oudh by Chandragupta II (the first was the Mauryan), who founded the dynasty of the Imperial Guptas and reigned A D 319 30, with a capital again at Patna Samadragupta (330-75) extended the kingdom to Assam, made an expedition into Orissa and along the coast to Conjeeveram, and acquired the Deccan, Malwa, and Bundelkhand Vikramaditya Chandragupta III (375 413) consolidating these gains, added Kathiawar, Gujarat, and the Mahratta country His capitals were at Ajodhya (p 422) and Kaushambi (p 511), and he held India north of the Krishna river, except that portion north of a line from Sukkur in Sind to Delhi and Umballa In the time of Kamaragupta (413-53) there was a great advance of literature, and Kalidasa wrote the Sakuntala Towards the end of his reign Skandagupta (455 80) had to repel invaders, the "White Huns," who had in 455 driven out the Gandharans into Kashmir and Gilgit One of these, Mihirakula, occupied Sangala (Sialkot, p 361) and the Rechna Doab between the Chenab and Ravi rivers It is supposed that these Huns were absorbed into the "soldier caste," by Brahmanism but if so the chivalrous Princes of Rajputana do not in the least dispray in history the unpleasant characteristics attributed to Huns elsewhere

Under the early, or Imperial Guptas settled conditions revived the work of the Guilds painters at Ajanta and sculptors at Sanchi, the vitality of plastic decoration being now restrained and more refined Examples are to be found in cave temples at Ajanta and Ellora, in the Dhamek stupa at Sarnath (p 98), and in flat-roofed temples at Deogarh (p 109), although the flat roof itself is not a distinctive feature of the period The treatment of mouldings and of other decorative features must be the true indication The later Guptas reigned from 455 until 606

In A D. 606 Harsha succeeded to the kingdom of Thanesar (p. 322), made Kanauj his capital, and extended his dominions to the Ganges delta, including Nepal, with the Narbada river as his southern boundary with the Chalukyans, attacking without success Pulikesin in 620 In 643 Hiuen Tsang, the Chinese pilgrim was present at a disputation where Harsha honoured equally Brahmans, Buddhists, and Jains Harsha died in 647, but a kingdom of Kanauj lasted, after many

dynasties had risen and fallen elsewhere, up to the time of the Muslim conquest in 1192

Meanwhile the Jain religion persisted unobtrusively, and their caves exist side by side with those of other religions The temples at Mount Abu (p 207) and elsewhere, including those rearranged as mosques at Ajmer and Delhi, have distinctive features in the deep-carved brackets of the capitals to the pillars, subdividing the covered area, and horizontal domes, thus avoiding the thrust of the radiating arch Hardly any two ceilings to the small squares between the pillars have the same design, while elaborate carved pendants hang from the larger horizontal domes in the Mount Abu temples, sometimes carved from two large blocks of marble made to fit. The two towers of Fame and of Victory at Chitorgarh (p 155) are examples of Jain work All those buildings mentioned belong to the period of what may be termed Rajput rule The Jains built temples in clusters or bastis (pp 230 and 587)

HINDU ARCHITECTURE

The earliest Brahmanical temples, probably built of wood, have disappeared The structural stone temple was a development of the stupa. An image of Buddha on the front might be covered by a porch, then moved into the interior, and the tee became a spire, surmounted by a copper gilt Kalas, too great a temptation to the plunderer The Hindu temple displays a small flag Stone temples date from the time of the Pallavas or of the Chalukhyans

The first Chalukyan kingdom arose about 550 By the time of Pulikesin (609–42) it lay south of a line from Ellora to Orissa, north of the Krishna river and west of the Tungabhadra, which rises in the north of Mysore It is possible that the Chalukyans at times ruled farther north Fergusson gave the name of Chalukyan architecture to a mixture of northern and southern styles, combining elegance of outline with elaboration of detail in animal friezes. It acquired distinctive traits, a polygonal (or later star-shaped) instead of a square plan, a high carved plinth, following the outline of the temple, and a low pyramidal roof, in horizontal layers, instead of the high *sikhara* or spire with vertical lines The style emanated perhaps at Aihoh (p 573) and Pattadakal close by Badami (once the capital of the Western Chalukyas) where there are caves also (A.D 550–80); temples at Somnathpur (p. 592) and Halebid (Dorasamudra), were built by the Hoysala Ballalas in A D 1000–1300 in a perfect style, covered with sculpture. In the north-east corner of the Eastern Chalukyan kingdom some temples of Bhubaneshwar (p 496) are dated from 500 onwards, and the Black Pagoda at Kanarak (p. 505) may have been built about 850 In the north-west corner the temple of

Kailasa at Ellora (p. 80), excavated out of hard trap rock externally as well as internally, is attributed to a Rashtrakutan king at Nasik, Dantidurga (725–55) a western successor to the Chalukyans. He is supposed to have adopted the style of a Papnath temple at Pattadakal. One authority places the Rashtrakuta dynasty between 753 and 972, when it was succeeded by a second Chalukyan dynasty until 1190. Yadavas at Deogiri and Hoysalas at Halebid (p 586) followed.

Shankar Acharya (788–820), who founded the Sringeri Math in Mysore, gave Hinduism a great impetus Temples in the *Dravidian* style are well represented and accessible at Hampi (p 575) and all along the South Indian Railway from Madras to Rameswaram (p. 669) The oldest may date from 1050. A square (often twin) shrine is covered by a pyramidal storeyed tower (*vimana*) and a porch (*mandapam*), sometimes multiple, covers the approach, but the principal features are high oblong *gopurams* or pyramids over the gateways, near the cardinal points, to the quadrangular enclosures and courts which may have cloistered corridors At Tanjore (p 652) one *gopuram*

CHRONOLOGY

622 (16th July) Muhammad flies from Mecca, A H era
711 Invasion of Sind
725 Occupation of Gujarat
1001. Mahmud of Ghazni raids India 1026
1192 Shahab (or Muiz-) ud din of Ghor defeats Prithwi Raj
1195 Qutb ud din Aibak takes Anhilwara
1310 Malik Kafur raids Southern India
1323 Muhammad ibn Tughlaq takes Warangal and proceeds South
1336 Vijayanagar kingdom founded
1347 Bahmani kingdom in Deccan
1398. Timur invades and takes Delhi, returns
1424 End of Hindu kingdom of Warangal
1489 Bahmani kingdom split into five
1509–30 Krishnaraja of Vijayanagar
1556–1605 Akbar
1565. Deccan Muslims defeat Hindus at "Talikota"
Vijayanagar gradually breaks up
1590. Akbar's son takes Ahmadnagar City
1639. Raja of Chandragiri grants Madras to English
1658. Aurangzib deposes his father
1687. Aurangzib conquers Golconda.
1698. Capture of Gingee and Carnatic.
1707. Death of Aurangzib; decay of Empire began.

is 216 feet high. Some of the carvings in these temples are immoral to Western ideas, but they may have a mystic interpretation. There are rock-cut temples at Mahabalipuram (p. 624) south of Madras, A.D. 150–800, and at Conjeeveram (p. 617), the work of Pallava kings, one of whom was contemporary with and fought with Pulikesin of Chalukya. Afterwards the Cholas at Tanjore and Pandyan kings (at Madura, p. 661) were great builders from 950 onwards. In 1023 Rajendra Chola raided into Bengal. Wars stopped building.

The *Indo-Aryan* style of Fergusson's nomenclature prevailed north of the Tapti and Mahanadi rivers, and includes some of the temples at Bhubaneshwar (p. 496) which date after 950 and illustrate the development in the same way as Muslim architecture is developed at Delhi. Another large group is at Khajraho (p. 175) some temples being Jain, in a variety of this style. A curvilinear steeple divided into vertical bands above a square sanctuary may have developed from the bamboo spire of primitive times. In palaces the style is seen at Gwalior (p. 182), Udaipur (p. 156), Amber (p. 222), and Dig (p. 256), and it still persists in modern buildings.

MUSLIM CONQUEST

The follower of Muhammad has been called Mahomedan, Muhammadan, Moslem or Muslim, but the last term was adopted by Sir Syed Ahmad for the University at Aligarh and is in common use. The Muslim does not forget that his co-religionists were at one time paramount in India, although his ancestors may have been Hindu, converted by force, or for reasons of policy, or by real conviction.

After the death of Muhammad a wave of conquest rolled west from Arabia through Egypt and along the northern shore of Africa, crossing into Spain in A.D. 711. In the same year piratical attacks from Sind on Arabian cities provoked reprisals, and Muhammad bin Kasim sailed up the Indus to Aror (p. 398) and Multan, the Muslims retaining their hold on Sind and the Punjab to the borders of Kashmir. In 1001 Mahmud of Ghazni took Peshawar and started raids into India almost yearly, to Kangra in 1008, Muttra in 1017, and Somnath (p. 239) in 1024; one of his lieutenants took Benares in 1033, after Mahmud's death. Masud, his successor, conquered the Punjab in 1036, but in 1038 Seljuk Turks took Ghazni and, although the Punjab was held by descendants of Masud, raids ceased.

In 1176 Shahab-ud-din of Ghor took Sind, and in 1178 attempted, but failed, to take Gujarat. In 1179 he took Peshawar, and in 1181 built a fortress at Sialkot (p. 361) deposing the last descendant of Masud. In 1191 he advanced to Bhatinda and at Taraori, north of Karnal, fought against Prithwi Raj of Delhi, by far the strongest ruler in India, unsuccessfully, being wounded. In 1192 he defeated the Rajput and took Ajmer (p. 216) but not Delhi, which his general Qutb-ud-din Aibak

took in 1193, after taking Benares Kanauj (p 429) fell to him in the following year, Anhilwara (p 206) in the next year. By 1202 the dominion had been extended to Gaur (p. 470) and Nadia (p. 466) in Bengal. In 1206 Shahabad-ud-din, commonly known as Muhammad of Ghor, was killed and Qutb-ud-din assumed the title of Sultan, with Delhi as his capital * Here (p 281) the development of Indo-Saracenic architecture can best be studied in tombs, mosques, and palaces, showing the adoption of the dome and radiating (no longer horizontal) arch, and culminating in the Palace buildings in the Fort Fatehpur Sikri (p. 274) and Agra (p 259) fill in the gaps in the Mughal period.

Extension towards the south was begun under Ala-ud-din Khilji by an expedition in 1297 into Gujarat (p 240) His general, Malik Kafur, went much farther, took Warangal (p 560) in 1309, and Halebid (p 586) in the following year, after which he went down to the coast, and some say to Cape Comorin or Rameswaram (p 069), but his occupation of the south was not effective The terrible Muhammad ibn Tughlaq (1325–51) advanced in 1323 from Cambay into the south, took Devagiri and Anagundi (p 575), but restored it to the Hindus, and also Warangal (p 560) east of Hyderabad. In order to centralise his administration, in 1338, he ordered a wholesale emigration of the inhabitants of Delhi to Devagiri (Daulatabad, p 73) and did the same in 1340, but famine in the Deccan made him order their return In 1326 Halebid had been destroyed, but the Hindus of Warangal, Anagundi, and the Hoysala Bellalas combined, and in 1336 the kingdom of Vijayanagar (p 575) was founded. In 1378 a remnant of the Muslims, still in Madura, was conquered

Muslim occupation of the Deccan was now effective, although not for long subject to Delhi The Bahmani kingdom arose at Daulatabad and moved to Gulbarga (p 528) in 1347 Firoz Shah of Delhi did not interfere and his successors became too weak to do so, especially after the raid of Timur in 1398 Bahmani rule extended from the Krishna river north into Berar and Ahmadnagar and west to Bijapur, but Warangal had been retaken by the Hindus in 1345, and resisted until 1424. In 1470 the Bahmani captured Rajamundry beyond the Godavari but not permanently For more than two centuries Vijayanagar led a confederacy of the south in far too great a force to be conquered There were at least twenty-eight clashes between Muslims and Hindus, usually in the triangle formed by the Tungabhadra and Krishna rivers, especially round Raichur and Mudgal, and Adoni, south of the Tungabhadra At times the Hindu Raja had to pay tribute, but his wealth was enormous His territory extended, at one time or another, from Rajamundry (p 509) along the Carnatic to Trichinopoly (p 056), and Tinnevelly (p 067) up along the west coast to Goa, where later the Portuguese did a great trade in horses with him. His Muslim adversaries became weakened by the splitting up of the Bahmani kingdom in and after 1489 into five dynasties

Berar (Imad), Ahmadnagar (Nizam), Bijapur (Adil), Golconda (Qutb), and Bidar (Barid), to which place the Bahmani king had moved his capital in 1428 from Gulbarga, calling it Ahmadabad after himself. In 1520 the Hindu Raja occupied Bijapur. At last there were attempts at combination against Rama Raja (1535–65) and four Muslim kings combined to defeat and kill him at the battle of Talikot (so called, for the field lies many miles away, at a bend of the Tungabhadra). Into this battle the Hindu is supposed to have put three-quarters of a million men, with 2000 elephants, his opponents having half that number of men with 600 guns. Fantastic as these figures may seem, it must be remembered that most men were then accustomed to the use of arms, in a levee *en masse*. These the Vijayanagar Raja could supply, for diamonds were found in profusion in his territory. He kept only the largest, but when the heir presumptive fled to Penukonda (p. 582) he is said to have taken three chests full of them. Aurangzib, as Viceroy of the Deccan, was able to take a huge army to usurp the throne in 1658 (see *Handbook of Indian Arms*, Lord Egerton of Tatton).

The Muslim coalition lasted long enough for a thorough sack of Vijayanagar, but little conquest farther south was then attempted. Adoni fell into Bijapur hands in 1572, and Rajamundry to Golconda in the same year, with further additions almost down to Nellore in the Carnatic in 1579. In 1593 Bijapur took Seringapatam, but trouble at home caused a withdrawal. In Mysore Bolacharama Wadiyar, Viceroy of Vijayanagar, refused tribute after the battle of Talikota, and became independent. Kantharava Narasimha (1638–59) and Doddadevaraya (1659–72) extended the borders and consolidated the State. Chikkadevaraya (1672–1704) fought many battles and patronised many bards. He acquired Bangalore from Vyankoji the Mahratta, organised the administration (Athara Kutcherry), established a postal service, constructed irrigation works, and formed a friendship with Aurangzib, who conferred on him the title of Jagat Deva Raja and presented the ivory throne (p. 596). Chikka Krishnaraja Wadiyar (1734–66) fell under the sway of intriguers and in 1761 Haidar Ali, a soldier of fortune, became master of Mysore. Tipu, his son, lost the State in 1799 and the Wadiyar family was restored, until the events related on page 589. The "rendition" of this very rich State by the British Government in 1881, after nearly fifty years of administration, caused a great sensation, and is perhaps not now so much appreciated, but the State has not ceased to develop under wise rulers.

In 1602 the Nayakkas became independent in Madura and Tanjore, while the States of Gersoppa (p. 585) and Bhatkal also broke away, but the descendant of the Vijayanagar Raja at Chandragiri (p. 532) was able to confirm a grant of land to the English at Madras in 1639. In 1647 Golconda captured the surrounding territory and renewed the grant. In 1687 Aurangzib captured Golconda and the Carnatic came

into the Mughal Empire This marked the high water of Muslim conquest

The extension of the Mughal Empire into the Deccan can hardly be termed a Muslim conquest, although Akbar (1556–1605) had to subdue the Rajputs at Ajmer and Chitorgarh (1567) before he could absorb Gujarat, Ahmadnagar and Berar, all Muslim kingdoms. Aurangzib swept away the remaining Muslim kingdoms, Bijapur and Golconda, and took Gingee (p 644) from the Mahrattas in 1698 His death saw the beginning of the end of Muslim rule

Indo-Saracenic buildings should be viewed from some high point, such as a gateway

MAHRATTA RULE

SIVAJI, the Mahratta leader (1627–80), has become the hero of all Hindus His grandfather, Malaji Bhonsla, in 1560 received a grant of land at Poona from the Ahmadnagar Sultan (p 526) Almost immediately the territory was transferred to Bijapur by arrangement with Akbar Sivaji rebelled in 1646 The Mahrattas had plenty of war experience in the armies of Bijapur and Ahmadnagar

CHRONOLOGY

1646 Sivaji (1627–80) makes war on Bijapur
1677 Sivaji captured Gingee
1689 Shahu grandson prisoner to 1707
1713 Balaji Vishvanath appointed Peshwa by Shahu
1719 Mahomed Shah of Delhi grants Chauth in Deccan
1750 Balaji Baji Rao, Peshwa assumes power
1761 Third Battle of Panipat, Ahmad Shah defeats Mahrattas
1761 Fourth Peshwa Madho Rao 1772
1771 Shah Alam at Delhi after twelve years
1775 Raghava Rao Peshwa (expelled) signs Treaty of Surat
1776 Treaty of Purandhar, with British
1779 Convention of Wargaum with British (Bombay)
1782 Treaty of Salbai negotiated by Scindia
1795 Last Peshwa Baji Rao II (son of Raghava)
1802 Battle of Poona, Holkar defeats Peshwa and Scindia
Treaty of Bassein, fugitive Peshwa and British
1803. Mahratta War, Wellesley in South, Lake takes Delhi
1817. Pindari War and Third Mahratta War
1818. Peshwa deposed and sent to Bithur.

In 1656 he took the fort of Pratapgad (p. 536) and proceeded to capture other forts in Maharashatra, making his capital at Raigarh In 1664 he plundered Surat in Mughal territory Attacked by them in 1666 he went to Delhi, but escaped back to the Deccan In 1673 he took Satara and raided Golconda also In 1674 his brother Ekoji, or Vyankoji, took Tanjore (p 652) In 1677 Sivaji marched right across India (the Muslims on his flank consenting), taking Kurnool, Vellore, and Gingee (p. 644) near Madras He died in 1680 The cult of Sivaji has become a leading feature of the Nationalistic movement in Western India, and especially at Poona, where a statue was unveiled in 1928 His exploits are recited by the *gondhali* or wandering minstrel to rapt village audiences, and lose nothing in the telling It is the great merit of Sivaji in Hindu eyes that he challenged the Brahman monopoly and showed that a Hindu revival was possible in which all classes could unite on the basis of a common patriotism against the Muslim conqueror.

His son Sambhaji was captured, blinded, and executed by Aurangzib, and his grandson Shahu, released in 1707, had none of the hardy Mahratta qualities. He appointed a Konkan Brahmin named Balaji Vaishvanath, as his Peshwa or Minister (1714–20) in whose family the office became hereditary (1740), next year circumstances enabled the Peshwa to assume power In Nepal there is an hereditary and governing Maharaja for the King is held to be too holy to rule

In 1705 the Mahrattas invaded Gujarat and exacted tribute from 1723 onwards In 1718 Balaji Peshwa sent a force to intervene in affairs at Delhi, and in 1720 his troops took part in a Mughal expedition against Asaf Jah, the Nizam ul Mulk and Subadar of the Deccan since 1713 but the Mughals returned from Agra to Delhi. The Peshwa, however, then obtained from Mahomed Shah for the grandson of Sivaji, the right to the "Chauth" or one-fourth of the revenues in return for the feudal service of supplying troops In 1732, under the second Peshwa, Baji Rao I (1721–40), Malhar Rao Holhar seized Malwa, which was ceded to the Mahrattas under Balaji Baji Rao (1740–61), and in his time Janoji, son of Raghoji Bhonsla, the Chief of Nagpur and the leading Mahratta feudatory, invaded Bihar and Bengal, obtained the cession of Orissa, and of the chauth of Benga from the Murshidabad Viceroy, Ali Vardi Khan This caused the construction of the Mahratta Ditch round Calcutta in 1743 as a means of defence, although there were no means of garrisoning such a perimeter.

In 1739 Nadir Shah, the Persian, had dealt the Mughal king a heavy blow, and the Mahratta power became stronger and stronger until it received a severe set-back at the battle of Panipat in 1761 against Ahmad Shah Abdali or Durani (p. 320) The Bhao, or generalissimo and cousin of the Peshwa, was missing. Scindia nearly

lost his life, the Peshwa's son was killed, and the life of the Peshwa himself is believed to have been terminated by grief.

Ranged in order from left to right at this time were four great chiefs: the Gaekwar at Songhad in Gujarat, Holkar in Malwa, Scindia on his right, and the Bhonsla Raja in Nagpur. None of them were Brahmans. Sivaji himself was a *kunbi*, or cultivator, although a pundit from Benares drew up a pedigree of his descent from the Sun in order to justify, in Mahratta Brahmin eyes, the coronation of a Sudra. But although possibly some were of low caste, each of these Chiefs had a military sense, as was shown by Mahrattas in the World Wars, and they would have been formidable antagonists if they had consented to combine permanently. Ahilya Bai (p. 146) kept her Indore dominions quiet from 1765-95. Against the Nizam and Haidar Ali of Mysore, the Peshwa directed operations through generals who never made themselves independent.

Under the fourth Peshwa, Madho Rao (1761–72), the four Chiefs became almost independent, and Scindia in particular extended the territory assigned for the support of his troops until in 1771, when Shah Alam (who had succeeded in 1759) decided against the advice of Warren Hastings, to return to Delhi, he was met by a vakil of Scindia with a message that he must acquiesce in the grant of the chauth and place himself under his master's protection. This was not always effective, for in 1788 a Rohilla, Ghulam Khadir, obtained temporary possession of Delhi and blinded Shah Alam.

In 1772 the Mughal made over to the Mahrattas the revenues of Korah and Cuttah (p. 438) and the East India Company ceased payment of them, so that their most formidable opponents should not benefit. Scindia, however, had resources which enabled him to build up a powerful French trained army. Shah Alam was not relieved from his tutelage until 1803.

The next Peshwa, Madho Rao Narayan (1774-95) succeeded as an infant, and was under the control of his minister Nana Farnavis, who was able to keep the Chiefs in some sort of combination until his death in 1800. The succession of this Peshwa was disputed by his uncle, the Peshwa, Raghava Rao, and he sought the help of the British in Bombay. The results are described later.

The last Peshwa ruled nominally from 1795 to 1818. In 1802 Jaswant Rao Holkar defeated him and Scindia in the battle of Poona (p. 523), and the Peshwa sought British aid, signing the Treaty of Bassein. In consequence Colonel Arthur Wellesley advanced from Harihar (p. 584) in Mysore into Mahratta territory and restored him in 1803, defeating the recalcitrant Scindia and the Bhonsla Raja, while Lake advanced from Cawnpore, ceded by Oudh in 1801, and took Delhi. Berar, west of the Wardha river, was ceded and given to the Nizam, but he was required to maintain a contingent, officered

by the British, for the safety of his dominions. Owing to arrears in payment this arrangement has had to be modified (p. 133) on more than one occasion, the last settlement having been made in 1936. Gujarat and Orissa also were ceded to the British, who had occupied these provinces. Otherwise, the close of this war did not result in great additions to British territory at the cost of the Mahrattas. Another war arose over a great round-up of raiding Pindaris in Central India in 1817, but the Peshwa (in spite of a new treaty) and Indore took their part. The Peshwa was defeated at Kirkee, was deposed and sent on a pension to Bithur, where he died in 1853. The Nana Sahib was his adopted son. Thus the Bombay Presidency was extended at last above the Sahyadri or Western Ghats. The Bhonsla Raja, Appa Sahib, was defeated at Sitabaldi (p. 136) and deposed. The Indore army at Mehidpur on the Sipra river, sustained defeat and Khandesh was surrendered. Scindia had been detached by a treaty. Until the Nagpur Raja died childless in 1853, and the Central Provinces were formed, no other Mahratta territory was acquired by the British. The dominions of Scindia, Holkar and the Gaekwar still cover a very large area.

EUROPEAN ARRIVALS

THE Portuguese were set on the road to India by Prince Henry the Navigator (1394-1460), a grandson of John of Gaunt. He founded a naval school at Sagres, near Cape St. Vincent, in 1419. It was a slow process. They crept down the West Coast of Africa to the Congo river in 1484, and in 1486 Bartolomeo Diaz discovered the Cape of Good Hope. Settlements were made on the East African coast. In 1498 Vasco da Gama arrived at Calicut (p. 639) but returned to Lisbon. In 1505 Almeyda arrived as first Viceroy at Cochin (p. 636) with a large armament, and d'Albuquerque, succeeding him, captured Goa (p. 543) in 1510.

The English came much later as traders only although their ships had to carry guns against pirates. The Charter of the London Company was granted by Queen Elizabeth on 31st December 1600. First a factory was founded at Bantam in Java, and Armagaum (p. 605) on the Coromandel coast was a branch, founded in 1625. There were other agencies along the coast, but Madras was not occupied until 1639, under a grant of a Naik of Vijyanagar confirmed by the Raja in 1645, reconfirmed by Golconda in 1647, and by the Nawab of Arcot in 1763. Madras also was a branch of Bantam, until it became a "Presidency," under a governor or president with a council, in 1683. Trade was carried on under concessions obtained from local rulers, or from governors under the Mughal King.

On the west coast Surat (p. 189) was opened to English traders

by a firman of Jahangir in 1612, and on this coast also there were many posts, separate or shared with French and Dutch traders. The marriage of Charles II with Catherine of Braganza in 1661, brought from her brother the first acquisition of territory, Bombay Island, which had been obtained from the King of Gujarat by the Portuguese in 1534. It was occupied in 1665 and handed over by King Charles to the Company in 1668 (p 2) The Western Presidency was moved there from Surat in 1687, and in 1689 the Mughal attacked until satisfied by a fine in 1690

In Bengal the Portuguese had founded Hooghly in 1537, but the English factory here was not started until 1651, again by concession The Dutch had been at Chinsura (p 130) since 1645 In 1690 the English returned to Calcutta (p 103), and it was fortified by consent of the Nawab of Dacca, but this post was under Madras until 1699 and was not recognised as a Presidency until then The villages round Calcutta were acquired by consent of the Nawab of Bengal The term "Conquest of India" therefore does not fit the facts, at all events not for many years, indeed, in Pitt's India Act of 1784 it was expressly disavowed

The French, with whom business was a secondary consideration in the limited hinterland of Madras, taught the English (or British after the Union of 1707) to take a part in politics and war The French settled Pondicherry (p 645) in 1672, lost it to the Dutch, but got it back The War of the Austrian Succession (1740–48), in which the British took part against the French in 1744, caused hostilities

CHRONOLOGY

1498. Vasco da Gama arrives at Calicut
1510 d'Albuquerque captures Goa
1600 Charter of Queen Elizabeth to London Company
1612 English traders in Surat.
1625 Armagaum on Coromandel Coast, first "factory."
1639. Madras occupied (Presidency, 1683)
1665 Bombay transferred by Portuguese to English, to London Company 1668. (Presidency, 1687)
1672 French settle Pondicherry
1690 English reoccupy Calcutta (Presidency, 1699)
1746 Madras surrenders to Labourdonnais. Dupleix takes over (Restored by Treaty of Aix la Chapelle, 1749)
1751. War, British and French, in India only
1752. Clive at Arcot (to England 1753, returns 1755).
1756. Calcutta taken by Suraj ud daulah; "Black Hole."

1757. Clive recovers Calcutta; Battle of Plassey.
1764 Battle of Buxar; firman from Shah Alam, 1765.
1767. First Mysore War.
1772 Warren Hastings, President in Bengal (Gov.-General, 1774–1785)
1778. General Goddard's march across India Mahratta War, to 1783
1780 Second Mysore War with Haidar Ali and Tipu, - 1784
1788. Trial of Hastings, acquitted 1795
1790–92 Third Mysore War with Tipu, Treaty of Seringapatam.
1798–99 Fourth Mysore War Tipu killed at Seringapatam
1803. Lake takes Delhi
1809 British territory advanced to Sutlej by Treaty of Amritsar
1849. Occupation of the Punjab after Second Sikh War

Labourdonnais, Governor of Mauritius, arrived before Madras in 1746, and the citizens, who had a fort but no means of defending it, could only submit to a ransom, with which Labourdonnais sailed away, to finish his life in the Bastille Dupleix, Governor of Pondicherry, occupied Fort St George, but it was restored in 1749 after the Treaty of Aix-la-Chapelle (1748) Paradis, with 400 men, had defeated the Nawab of Arcot, who advanced to take the place, and thus showed how Europeans could fight

The next war with the French in India was waged in 1751, while Britain and France were at peace It arose over questions of succession to the offices of Subahdar of the Deccan (Asaf Jah died in 1748 at the age of 75) and Nawab of the Carnatic, both supporting rival claimants Madras had had a breathing space, had raised some European troops and sepoys The term European is correct, for the men were enlisted from many sources, and indeed at the time of the Mutiny in 1857 there were many Germans in the "European Fusiliers" The diversion made by Clive against Arcot (p 600), with a very small force, not only was brilliant strategy, drawing away much larger forces, but also established the prestige of British-led troops, especially among the Mahrattas It may well mark the commencement of the "conquest" The British Government complained to the French king about Dupleix, who was recalled to France (1754) to die in poverty in 1764. His greatness is recorded by a statue at the end of the pier at Pondicherry, at Chandernagore and by one at Landrecies, his birthplace "

In 1756 the Seven Years War commenced and the French sent out Count Lally de Tollendal, a hero of Fontenoy, with his own regiment and the Regiment de Lorraine to Pondicherry in 1758. He took Fort St David in 1758 but failed to take Madras (1758–59), and after being

defeated by Eyre Coote at Wandiwash in 1760 (p 644) had to surrender Pondicherry in 1761. He was sent to England, but decided to return on parole to France, where he was thrown into the Bastille and executed in 1766. By the Treaty of Paris the successions to Hyderabad and Arcot were settled, but the British were not relieved of apprehension about French influence until 1803, for the Nizam had a French contingent (1750 to 1799) and De Boigne (recommended by Warren Hastings) built up with French officers a formidable army for Scindia between 1782 and 1796, and was succeeded by M Perron.

Some English troops had been sent to Bombay in 1665. In 1754 the first King's regiment (39th Foot), commanded by Adlercron, arrived at Fort St David, and other regiments followed. Madras now had military as well as commercial aims. In 1756 Calcutta was in great difficulty owing to the action of Suraj-ud-daulat, Nawab of Bengal, aged 20 when he succeeded in 1755. Captain Clive, who had gone out on the *Stretham* in 1755 as Deputy Governor of Fort St David, sailed from Madras, taking two months on the voyage. He treated with the Nawab while he collected or raised and trained a very few troops. He captured Chandarnagore, depriving the Nawab of French support, and won the battle of Plassey (p. 467) in his thirty-second year. This good turn from the "Benighted Presidency" was repaid by Warren Hastings in 1780. Clive returned to England but was sent out in 1765 to remedy abuses among servants of the Company. In 1764 Hector Munro had won the battle of Buxar (p. 60) defeating the King of Delhi, Shah Alam, and the Vizir of Oudh, supporting Mir Kasim, Nawab of Bengal, an important event. Clive got at Allahabad (p. 47) a royal firman (1765) making the Company Diwan of Bengal, Bihar and Orissa, receiving the revenues and being responsible for the defence, and another for the Northern Circars, taken from the French in 1759 by Col Forde (p 508). Clive left India in 1767, and was refused a pension by the Company. In 1773 an inquiry was made into his administration and he was honourably acquitted, the Commons voting that he 'had rendered great and praiseworthy services to his country'.

Warren Hastings became President of Bengal in 1772. He had arrived in India (1750) as a clerk, at the age of 18, and became Resident at the court of the Nawab of Bengal, then at Murshidabad, in 1757. He thus obtained a good knowledge of the methods of Indian rulers. He became a member of the Bengal Council in 1761, returned to England in 1765 and was unemployed until 1769, when he was reappointed by the Company as second member of the Madras Council before being transferred again to Bengal. In 1774 he was appointed Governor-General in Bengal, under the Act of 1773, with a Council which had authority over other Presidencies in relations with Indian Rulers. A great deal of controversy has raged over the acts

of his administration, for some of which his Council was responsible. Many have formed opinions based on the sonorous prose of Lord Macaulay, heard at school prize-givings, and are apt to accept his accuracy, because he was a Member of the Bengal Council (1834-38). Insomuch as he declares that "the preservation of an Empire from a formidable combination of foreign enemies, the construction of a government in all its parts, were accomplished by him" all would agree, and contemporary Indians as heartily as his own countrymen When, however, Lord Macaulay accuses Warren Hastings of "great crimes" he erred in a desire to deepen the shadows of the picture. Light was thrown on the Indian transactions by the publication in 1907 of *Selections from the Letters, Dispatches and other State Papers preserved in the Foreign Department of the Government of India, 1772-85.* The editor, George W Forrest, Librarian at the India Office, said in his Introduction: "The time has come when the rash and indiscriminate judgments passed on Hastings and his work should be carefully revised" These Selections show in which actions the Council prevailed Hastings was impeached, and his trial by the Lords lasted from 1788 to 1795, when he was acquitted (by the twenty-nine peers who had lasted out) of all the charges, reduced by that time from twenty-two to four This trial is of further interest because the verdicts of each peer on each charge were given in a form now obsolete, since the trial of a peer by his peers in 1936 drew attention to the undesirability of the procedure

The execution of Nand Kumar in 1775 is a matter of argument for lawyers, but, although his arrest on the charge of forgery of a deed took place two months after he brought charges against Warren Hastings, there is no reason to suppose that Hastings inspired the charge, because preliminary proceedings had been taken earlier. Nand Kumar was tried by a Full Bench of the new Supreme Court, which applied to him a Statute of George II (1729) In 1777 the Rev Dr Dodd was hanged for forgery in England.

The policy of Warren Hastings was to exert a unifying influence by maintaining friendly relations, and by treaties, with the principal powers, the Peshwa and almost independent Mahratta Chiefs, the Nizam of Hyderabad, and Haidar Ali of Mysore, and also to keep them to their boundaries. As a buffer in the north-west, he supported the Nawab Vizir of Oudh to the utmost. The Company's Bengal army had grown from 1500 Europeans and nineteen battalions of sepoys in 1765, formed into three brigades—at Monghyr, Allahabad, and Bankipore—each including a European battalion and a troop of Indian cavalry, one company of artillery, and seven sepoy battalions. In 1781 there were three regiments of cavalry, three European battalions, and forty-four battalions of sepoys, besides militia and bodyguards of local dignitaries. There was also a French detachment, taken into service after the falls of Chandarnagore and Pondicherry. The

army, however, was not used for aggression, although it had to be used to support the other two Presidencies in consequence of embarrassing mistakes of policy, and part was lent on payment, which was always hard to collect, to the Nawab of Oudh in 1772 and 1774, for the Rohilla War and afterwards

In 1775 Bombay made a treaty (of Surat) with the fugitive Raghunath Rao, the uncle of the Peshwa, an infant, to obtain Salsette and Bassein, but the Minister Nana Farnavis, at the head of one faction, dissented. The Bengal Council also disapproved, and Col Upton was sent across India from Kalpi, a two months' march of 948 miles, to conclude the Treaty of Purandhar in 1776 He remained there a whole year and then marched to the Coromandel Coast, reaching Calcutta on 1st July 1777

The treaty with Raghunath was annulled and no assistance to him was to be given, while Bassein (p 32) was not taken, Broach and twelve lakhs were to be given to the Company Bombay and Raghunath were indignant Then followed further hostilities between Bombay and the Mahrattas In support of the Presidency Hastings sent a force of one cavalry regiment, six sepoy battalions and an artillery train across India under Col Goddard (succeeding Col Leslie, who died) Starting from Kalpi, the force reached Burhanpur (p 42) early in 1779 There Goddard, now General and Plenipotentiary, learnt of the defeat of the Bombay force, and the Convention of Wargaum (p 516), so he turned along the Tapti valley to Surat, took Dabhoi (p. 194) from the Peshwa, detaching the Gaikwar, took Ahmadabad, and at the end of 1780 Bassein, covered by Col Hartley Early in 1781 Goddard forced the Bhor Ghat (p 513), but had to retreat Hastings used diplomacy, made a treaty with Scindia in 1781, and this was followed by the Treaty of Salbai, ratified at Poona in 1783, which gave peace for twenty years

In 1778 the War of American Independence was supported by France, and Pondicherry was taken by Hector Munro Madras proceeded to send a force to take Mahe (p 640) in 1779, although warned that Haidar Ali of Mysore would disapprove, and in consequence he made a treaty with the Mahrattas He attacked Madras, and the disaster of Pollilur (p 622) followed (1780) Hastings appealed to Sir Eyre Coote, who had arrived as Commander-in-Chief Bengal, the previous year, to take command, and he sailed with 600 Europeans only, making the passage in the short time of twenty-four days. A force of five sepoy battalions had to be sent by land, the Raja of Berar having been induced by Hastings to permit their transit They did not join Sir Eyre Coote until August 1781, by which time Haidar had been defeated at Porto Novo (p. 648) In 1782 Haidar died, but Tipu disregarded his advice to make peace and the war went on until 1784, when the Treaty of Mangalore was framed. In 1783 the Treaty of Amiens had restored Pondicherry to the French, and Bussy agreed to

persuade Tipu Thus, when Hastings resigned in 1785 there was peace, of which Scindia took advantage to occupy Delhi in 1786.

Lord Cornwallis made an alliance with the Nizam and the Mahrattas against Tipu, who had invaded Travancore (p. 669) His territory was invaded in 1790 from Trichinopoly and Malabar by the British, and by their allies from the north, without much success until the Governor-General himself took command, and fresh forces made Tipu accept the Treaty of Seringapatam (1792) losing much territory, including Coorg (p. 597). The invasion of Egypt by Napoleon Bonaparte in 1798 caused Lord Mornington to renew war with Tipu, on the intelligence that he had sent a mission to Mauritius This time the invasion was made from Vellore (p 599) and again from Malabar, the "God-given" province of Mysore was conquered at Seringapatam, Tipu dying in the assault (1799) Mysore was restored to a descendant of the Hindu Raja, supported by a British force under Col Arthur Wellesley

After the second Mahratta War had ended Jaswant Rao Holkar became active in 1804 He started raiding in Rajputana and Central India, and then, defeating Col Monson, who commanded a corps of observation (p 247), marched on Delhi, which was defended with difficulty (p 297) His capital was taken by a Bombay force in August and Lake now moved from Cawnpore a force, before which Holkar retired to Dig, assisted by the Raja of Bharatpur, who lost this fortress (1804) Bharatpur withstood four assaults in 1805, before a treaty was made with the Raja Holkar wandered to the west, but in September moved north from Ajmere and at the end of the year a Treaty of Rajpur Ghat on the Beas ended this adventure, and hostilities with the Mahrattas, until 1817 Lake was anxious to make British a strip of territory west of the Jumna, but could not persuade the Governor-General (Barlow), and left India in 1807

The results of the Pindari War, the Conquest of Sind (1844), the Sikh Wars, the Burmese Wars, and the Nepal War, all against aggressive action, added some territory, but very large areas were left in the possession of their rulers Oudh was annexed (1856) on account of maladministration, and the Central Provinces (1853) because the line of Mahratta rulers died out. Since then (1862) the right to adoption has been recognised

THE MUTINY OF 1857

So great was the sensation caused by the Indian Mutiny that the great Baptist preacher, Charles Haddon Spurgeon, made it the subject of a sermon to 23,654 people at the Crystal Palace on 7th October 1857

It still deserves attention, because it was a serious attempt to destroy British rule by the instrument which had enabled that rule to be established. Forty-seven battalions mutinied, twenty were disarmed,

and only seven (one a Gurkha battalion) remained staunch The Hon East India Company, still the channel of Parliamentary control, was replaced by the rule of the Crown The Mutiny failed to receive any support from the great Indian Chiefs, showing that the treaties made with them had not been interpreted to take unjust advantage. Even the Amir of Afghanistan observed his obligations Only a general survey is possible, detailed accounts of the operations being available in the descriptions of Delhi, Cawnpore, Lucknow, Jhansi, and elsewhere The map facing this page shows the sources of the enemy's forces at Delhi and Lucknow, the Gwalior contingent (excepting some detached units) operating between the Jumna and the Ganges and against Sir Hugh Rose at a later stage

On the British side, the Punjab, with some assistance from Sind, provided the besiegers (at times the besieged) at Delhi To reinforce the besieged at Lucknow, and to carry out the final relief, much later, Madras, a China expeditionary force, and a large army sent out round the Cape from England, contributed The relief would have been more difficult if a force of Bombay troops, under Sir Hugh Rose, had not made a magnificent effort through Saugor and Jhansi (p 170) to Kalpi, and relieved the Commander-in-Chief, Sir Colin Campbell, from a "pain in the neck, due to looking over his shoulder" The exploits of Sir Hugh Rose have been termed 'theatrical,' but few leading figures have escaped some criticism from historians, who have no personal knowledge of the heat in March to September

It is possible for ingenious minds to find causes for discontent, but it is doubtful if many of the sepoys realised what may now seem obvious Recruited almost entirely from the Eastern Districts of Oudh, and belonging to the Kshattriya caste, they were under the control of *panchayats* or councils of five, headed by (but not always controlled by) the Subadar Major Disobedience meant excommunication, and intermarriage with his family might be prohibited until the sepoy had purged his offence Nevertheless a number remained loyal If there really was a plot, it was necessary only to persuade the *panchayat* and the battalion was won over Probably, however, as good an explanation as any of the Mutiny (Ghadr) was given by an Indian: "A wind blew and we all ran before it"

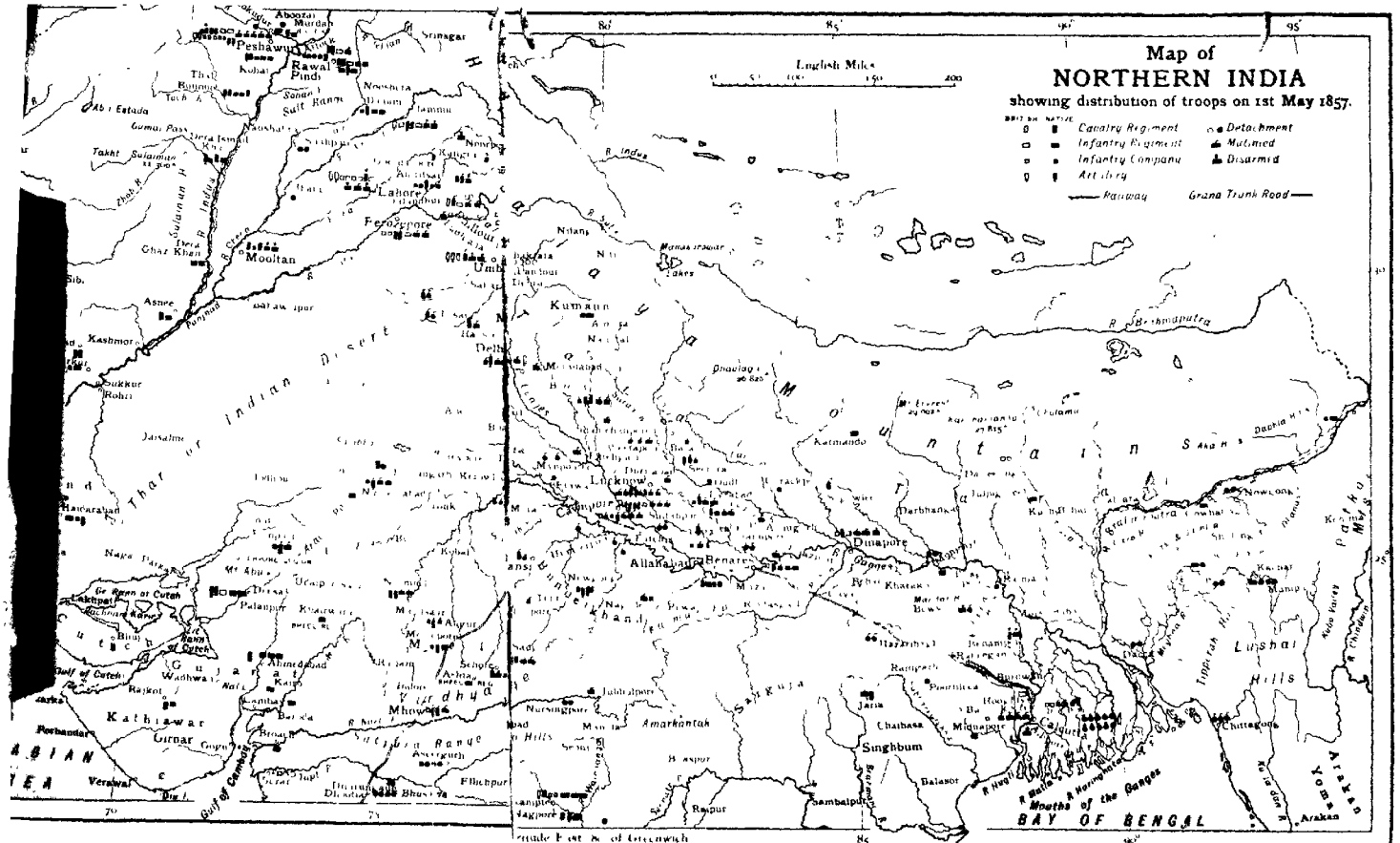
The "greased cartridge" may have been a contributory cause, but the usual version is wrong in essential particulars The Bengal sepoys had not been re-armed with the Enfield rifle, and therefore were not ordered to bite a cartridge which would destroy their caste Not all the "Queen's" Regiments, and none of the Company's European Fusiliers, had been re-armed. Detachments of all regiments were sent to musketry schools to receive instruction, but either these schools were broken up before firing commenced, or the sepoys accepted new regulations designed to calm their misgivings The refusal of the 3rd Regular Cavalry (mostly Mahommedans) at Meerut to accept cart-

amalgamating Punjab districts west of the Indus with the Political Agencies dealing with the Frontier Tribes. In 1905 the Lieutenant-Governor of Bengal having urged that his task was too heavy, Lord Curzon carried through the Partition of Bengal. Divisions north of the Ganges and east of the Brahmaputra were joined to Assam, the Chief Commissioner of which became Lieutenant-Governor of Eastern Bengal and Assam This was unpopular in Bengal, and a boycott agitation culminated in terrorism, to the perplexity of many Indians The Divisions were restored to Bengal in 1912, under a Governor appointed from England, as in the Presidencies of Bombay and Madras, but a new Province of Bihar and Orissa reduced the area The capital was transferred from Calcutta to Delhi

The system of representation without responsibility in the Advisory Legislative Councils did not go far enough for well-educated Indians like G K. Gokhale (1866–1915), who declared "We march round the fortress of bureaucracy, seeking entrance but finding none" An entrance was given by another Councils Act of 1909, embodying the Morley-Minto Reforms. Two Indians were appointed to the Council of the Secretary of State, another as Law Member to the Executive Council of the Governor-General, while others were appointed to the Executive Councils in Madras and Bombay Election was introduced for all Councils with non-official majorities in Provincial Councils The All-India Muslim League had been formed in 1908 and Lord Minto had promised communal representation, a step held by many (including Indian women) to have been a mistake, as tending to perpetuate a rift in national cohesion It was still considered, however, that training in administrative practice could be given best through Municipal and similar Boards, and stage by stage District Officers ceased to be *ex-officio* presidents of such bodies.

Indian loyalty and military effort in support of the British Empire during the 1914-18 War were appreciated by a declaration in Parliament in 1917 that the policy of H.M. Government was that of the increasing association of Indians in every branch of the administration, making "Responsible government in British India as an integral part of the British Empire" the ultimate goal. The wording has been variously interpreted, but the substance was incorporated in the Preamble of the Government of India Act of 1919, and the Preamble is the only part which was not repealed by the Act of 1935. Governors were appointed to the non-Presidency Provinces, previously administered by Lieutenant-Governors or Chief Commissioners, but these appointments continued to be made from the ranks of the Indian Civil Service, with the exception that Lord Sinha, the first Indian peer, was for a short period Governor of Bihar and Orissa.

In the Provincial governments a system of "Dyarchy" was applied, certain subjects being "reserved" to the Governor-in-Council (including Indian members), others being "transferred" to Indian


Map of
NORTHERN INDIA
showing distribution of troops on 1st May 1857.
Cavalry Regiment
Infantry Regiment
Infantry Company
Artillery
Detachment
Mutinied
Disarmed
Railway
Grand Trunk Road
English Miles
Peshawur
Rawal Pindi
Lahore
Ferozepore
Moultan
Kohat
Srinagar
Jammu
Attock
Sukkur
Rohri
Jaisalmir
Thar or Indian Desert
Kashmor
Delhi
Meerut
Agra
Allahabad
Benares
Lucknow
Cawnpore
Dinapore
Darbhanga
Katmandu
Nepal
Kumaon
Gwalior
Jhansi
Saugor
Nerbudda
Jubbulpore
Nursingpore
Amarkantak
Singhbum
Raipur
Sambalpur
Balasor
Midnapore
Jessore
Chittagong
Lushai Hills
Arakan Yoma
Arakan
Mouths of the Ganges
BAY OF BENGAL
Ahmedabad
Baroda
Surat
Kattiawar
Girnar
Mhow
Indore
Neemuch
Deesa
Palanpur
Mount Aboo
Nasseerabad
Ajmere
Jeypore
Bhurtpore
Gulf of Cutch
Gulf of Cambay
Lakhpat
Mandavie
Mundra
Porbandar
Veraval
Rajpeepla
Kamptee
Jagdeo
Seroor
Chanda
Hyderabad
Aurungabad
Poona
Kolapore
Belgaum
Goa
Sattara
Bombay
Nagpore
Jubbulpore
Mirzapore
Ghazeepore
Goruckpore
Fyzabad
Sultanpore
Roorkee
Meerut
Delhi
Umballa
Loodiana
Ferozepore
Lahore
Jummoo
Srinagar
Peshawur
Kohat
Attock
Derajat
Dera Ghazi Khan
Dera Ismail Khan
Bunnoo
Kushalgurh
Sukkur
Rohri
Jaisalmir
Jodhpore
Ajmere
Neemuch
Mhow
Indore
Gwalior
Agra
Meerut
Delhi
Umballa
Loodiana
Ferozepore
Lahore
Jummoo
Srinagar
Peshawur
Kohat
Attock
Derajat
Dera Ghazi Khan
Moultan
Bahawulpore
Ferozepore
Bhurtpore
Agra
Allahabad
Benares
Lucknow
Cawnpore
Dinapore
Darbhanga
Katmandu
Nepal
Kumaon
Gwalior
Jhansi
Saugor
Nerbudda
Jubbulpore
Nursingpore
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Gulf of Cambay
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Mandavie
Mundra
Porbandar
Veraval
Rajpeepla
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Jagdeo
Seroor
Chanda
Hyderabad
Aurungabad
Poona
Kolapore
Belgaum
Goa
Sattara
Bombay
Nagpore
Jubbulpore
Mirzapore
Ghazeepore
Goruckpore
Fyzabad
Sultanpore
Roorkee

Ministers, elected to the Legislative Councils, and appointed by the Governor, but not necessarily both of them from the party having a majority in the Chamber. To this extent responsibility was conceded To these Councils, which contained a nominated element, Government officials had (as in the past) to explain proposals in debate, but now they had a more exacting task, to endeavour to carry support to the point of a favourable vote. Failing this, the Governor-General at the Centre, or Provincial Governor, had to certify an Act or restore a money vote, if "votable." The Government still remained irremovable, although Ministers might fall from office

The Central Legislature comprised, by the Act of 1919, two Chambers, the Council of State and the Legislative Assembly, both with a preponderating non-official and elected element There was also a consultative Chamber of Princes (1921) to advise the Viceroy in his policy towards them He represented the Crown and held the portfolio of the Political Department Three Indians had seats on his Executive Council of seven (including the Commander-in-Chief, holding the Defence portfolio) A High Commissioner for India was appointed in 1920 to take over from the India Office "Agency" work, including the promotion of Indian trade, the purchase of stores, and the welfare of Indian students in Great Britain

The Act of 1919 provided for a full enquiry not later than ten years after its passing Meanwhile, the Congress Party in India had shown reluctance to co-operate in the Legislatures, although the debates were conducted with decorum, even if the subsequent vote was foreseen to be adverse In the winter of 1927 Sir John Simon, M P , was designated to preside over the Statutory Commission of Members of both Houses of Parliament, which toured in India Indians had agitated for membership of the Commission, but it was not a Royal Commission The Congress Party and some other sections of Indian opinion decided not to co-operate in any way The Report was presented in 1930 and was followed by Round Table Conferences, meant to find the greatest common measure of agreement, in 1931 and the two following years In 1931 M K Gandhi attended as sole representative of Congress In 1931 also there was a Burma Round Table Conference, which agreed to separation from India, first mooted by the Burma Chamber of Commerce in 1884

The British Government formulated proposals in a White Paper in March 1933, and this was considered by a Joint Select Parliamentary Committee, which reported late in 1934 A Government of India Bill was drafted, providing for Provincial Autonomy as a first stage, and for Federation of British Provinces and Indian States later. The Act received the Royal Assent in August 1935 Part II, the first stage, came into force on 1st April 1937.

The Provincial Governments numbered eleven, Sind being separated from Bombay, and Orissa from Bihar, the Governors of both having

be confirmed by two Judges of the High Court, and not in Chambers. Some of the High Court Judges are selected from the Civil Service, but the others are appointed, whether European or Indian, from barristers or advocates. Not every Province has a High Court. For example, the Calcutta High Court has jurisdiction in Assam, and the Patna Court sends Judges on circuit to Orissa

LAND REVENUE

THE land in India has from time immemorial been at the disposal of the ruler His revenue was mainly derived from rents paid for occupation, the tenure was leasehold, not transferable by deed or testament. Estates might be granted in *jagir* under a feudal tenure, entailing the raising and arming of troops and responsibility for good government. Some of the holders became independent when the central authority became weak. Usually, however, the *rayyat* had to pay in kind a certain proportion of his produce in the same manner as tithes in England, before commutation, were collected in tithe barns. The practice was probably in force at Harappa In normal times the proportion might be fixed, especially under the rule of Akbar, but in abnormal times it was raised as in the case of Raja Chait Singh of Benares (p. 87) When armies were on the move, "prickers" would precede them, probing in the ground for hidden stores of grain, while camp followers in the rear would take a toll also The cultivator could not "watch the legions thunder by" with equanimity

The collection of the revenue was often farmed out to Governors of Provinces, and sometimes these obtained their offices by a higher bid. They had a position to keep up and troops to support it, so that the rents demanded were higher in the aggregate than the ruler required. Subordinate officials followed suit In every class there was a stubborn resistance to payment and armed peons were maintained to enforce that payment, probably with a supplement Nevertheless, the Mughal monuments show what enormous quantities could be paid in times when food was probably very abundant for a much smaller population.

The Company's rule continued at first a well-established system A good deal has been written about the great difference between salaries paid by the Company to their servants and the apparent incomes of those servants At one time a President got £300 a year, a merchant only £30 and a factor only £20. Private trading had to supplement these sums, otherwise it was impossible to contemplate a return to England, a voyage which cost at least three hundred guineas. A writer became a factor in five years, a junior merchant in three years more, and a senior merchant after another three years. About 1765

a Member of Council got £250 a year, and the rent of a poor house in Calcutta was £200 a year. At this time a factor was getting £130 a year.

The Permanent Settlement in Bengal was instituted in 1793, was extended to Bihar and some adjoining districts in 1795, and to some of the northern districts of Madras in 1802 Land settlement elsewhere has been on different lines, but in parts of Bengal the great rivers have taken a hand, sweeping away and reforming great areas which have had to be resettled under modern conditions Over most of India the "ryotwari" system, negotiated with the cultivator, is periodical and possibly subject to the reproach of taking each time an "unearned increment" The enquiry is thorough, lands are classified by productivity, and by the possibility of raising a winter crop (kharif) as well as a summer (rabi) crop Canal-irrigated land has to bear an additional charge After consideration of these and other factors the rent, payable in cash, is settled for a period of years, but should the rains fail, large remissions of revenue are made, and actual out-turn is taken into account

The settlement may be made with a *zamindar*, but in general is made with the tenant or joint family, and they are able to mortgage land, often running heavily into debt for marriage expenses on a lavish scale out of proportion to their means There are millions of tenants who have a holding of less than an acre, possibly of an irregular shape, where a railway, canal or road has shaved off a corner Land acquisition for public purposes is paid for on a basis of rent for a period of years, with an addition for compulsory purchase and for removal of a standing crop, if any There is an army of officials, including surveyors, continually at work, because returns have to be submitted to Directors of Agriculture for the compilation of crop reports

A very large area is afforested, and the area is constantly being enlarged In 1877 there were 18,000 sq m , in 1936 a quarter of a million. A "forest" is not necessarily covered with large timber trees, but may be scrub jungle reserved for grazing or firewood, rights to which must be purchased Otherwise the villagers' cattle must graze on the stubble or on the village waste land, while for fuel there is little but cow-dung, the burning of which deprives the land of nourishment

The observer from the west is astonished that the flat prairies in the great river basins are not cultivated by deep ploughing and reaped by harvesters The small holdings supply one reason. A better reason is that the land is fertilised by silt, and that to turn it up deeply would distribute an annual thin layer of silt among a large quantity of worked-out soil. The villager has an experience handed down for centuries, although in certain localities agricultural research and instruction can improve out-turn.

The land revenue forms the mainstay of provincial finance. A reduction of rents makes an attractive electioneering slogan, but to those who have to carry on the government a serious diminution must be embarrassing. Central finance also must be affected because failure of any Province to meet obligations out of its own revenue makes a call on the Centre a certainty If climatic conditions could be regarded as constant, some arrangement might be made, but the S.-W monsoon has been known to fail only too often, and Finance Ministers take a lively interest in the monsoon forecast. This is framed on information received from the west coast of South America, the Indian Ocean, the east coast of Africa and elsewhere at various times as the current flows An enormous amount of calculation is involved, the result may differ in the second or third place of decimals, and a cautious pronouncement may be vitiated by the unforeseen.

IRRIGATION

THE tapping of the great rivers, fed by melting snow and rain, and the storage of water in places where the monsoon never fails completely, means an almost complete security and stability of out-turn The British laid out 146½ crores of rupees in works which irrigate 50,000 square miles, with an estimated crop value of 91 crores a year Not all the works are individually productive, that is, earn a sufficient rate of interest on capital outlay, but taking all together, the return is remunerative

The conservation of water is an old practice, exemplified by tanks at Udaipur and in Bundelkhand, for example In Southern India there are many tanks, in chains down a watercourse, most of them with earthen dams, very liable to burst if the N.-E. monsoon drops water into a tank already full. One bursting tank carries away the next dam and so on down the chain Many of the old reservoirs have been improved and are utilised for irrigation

Innumerable wells draw water from the subsoil but irrigate only 5 per cent. of the cropped area The water is raised by a leather bag or by Persian wheels In modern times, motor-driven pumps have been installed and they are particularly valuable to lower the sub-soil water level in tracts where salepetre (*reh*) may be drawn to the surface by evaporation Along the Runn of Cutch reservoir water becomes very salt.

The "father" of *canal* irrigation (the builder of the Grand Anikuts, p. 660, is unknown) was Firoz Shah Tughlaq (1351–93), who built a canal from the Jumna to Hissar. It was extended to Delhi by Ali Mardan Khan about 1640. The repair of this, Western Jumna, canal was the first British irrigation scheme in 1817–20. It had an outfall near Okhla, on the Jumna below Delhi. The Eastern

Jumna Canal (1830) from the same "head" also tails into the Jumna opposite Delhi

A terrible famine in the Ganges Jumna *doab* (see Glossary) in 1838 caused the building of the Ganges Canal, mainly by Proby Cautley of the Bengal Artillery, in 1842–54 It extends from Hardwar down to Cawnpore, and seven falls produce electricity (1913-37), operate tube wells, and light several towns on the "grid" system The *doab* down to Allahabad is irrigated from another head at Narora (p 417). The densely populated region north of the Ganges is irrigated from numerous tributaries The Sarda canal was opened in 1928 (p 418) A great hydro-electric scheme, in Nepal territory, is planned for the Kosi river

The annexation of the Punjab in 1849 found the country in a very bad condition In 1851–59 the Bari *doab* (Ravi-Sutlej) Canal was followed by the Sirhind Canal in the Sutlej-Jumna *doab* A Lower Chenab Canal (1892–1900) irrigates the Rechna *doab* between the Chenab and the Ravi The Jhelum Canal irrigates the Lyallpur District, where lands, previously waste, were settled by families, whose heads had given good public service, but large transfers have followed Partition The triumph of Punjab irrigation has been the Triple Canals scheme, which takes water from the Jhelum to the Chenab, then to the Sutlej, and enables an enormous area to be watered in the Bahawalpur and Bikaner States, on the fringe of the Great Indian Desert The Uhl river hydro-electric scheme is another great undertaking (p 341)

In Sind, the waters of the Indus have for many years enabled crops to be grown by inundation canals, in fact a great deal of inundation has to be prevented by levees which require careful watching A system of perennial irrigation was needed, but a barrage across the Indus required very careful examination of possibilities, and many predicted a disastrous outcome nothing less than the diversion of the river from its course The Lloyd Barrage below Sukkur (p 405) was built (1923–32) and in addition to the benefit to lands on the west bank, a very large area has been added to irrigated country on the east bank, where canals operated formerly at high water only A Lower Indus Barrage is projected

In the N.-W. Frontier Province the Kabul river has been tapped, and the waters of the Swat in tribal territory are taken through the Benton tunnel into the Kabul river valley generating electricity The tribesmen display remarkable ingenuity in driving tunnels for small watercourses In Bihar, West Bengal, and Orissa the Son, Midnapore and Mahanadi canals, and a Damodar River Scheme, may be mentioned

In Madras the name of Sir Arthur Cotton is remembered as an early exponent of irrigation canals. The country has a considerable slope towards the coast, and therefore his works were confined to the com-

paratively flat deltas. In 1834–36 he dammed the Coleroon at Trichinopoly (p. 660) and the Cauvery some years later. In 1847–52 he built a barrage at Dowlaishwaram on the Godavari (p. 509). The Krishna dam at Bezwada was built on his principles. He and others were rather too enthusiastic about using canals for navigation, but this was stopped by the Report of the Irrigation Commission, about 1904, as entailing a waste of water Irrigation from the Cauvery is not now confined to the Delta. The Mettur hydro-electric dam in the Salem district (p. 629) and the Krishnaraja Sagar in the Mysore State (p. 597) have been constructed, while the Cauvery Power Works also utilise the water to generate electricity A Tungabhadra river dam is projected.

Along the Western Ghats in the Bombay Presidency water is conserved, not only for the Tata Hydro-Electric Company (p 513), but also for the water supply of Poona and for the Nira canal system (p. 533), to mention one only In the southern extension of these ghats the Periyar dam (1887–96) turns water flowing normally west into the plains of Madura.

It may be difficult for want of precise information to substantiate a claim that any of these dams is the highest or longest, or holds up more water, than any other in the world, but they challenge comparison. Without such works the population could not have increased without great risk of periodical disaster.

THE CENSUS

THE (first in 1871) Indian Census at intervals of ten years is a gigantic undertaking, but the organisation makes it less difficult than might be expected, and the error in numbers is calculated to be less than one in a thousand. Classification is not so accurate, for various reasons, some of them usual elsewhere. Preparations commence with the appointment of a Census Commissioner, usually selected from officials experienced in land settlement work, or interested in civil conditions. Two former Commissioners were Sir Denzil Ibbetson and Sir Herbert Risley, and the last was Mr M W. M. Yeatts Assistants in the Provinces, and the District officials co-operate, but the cost would be enormous without the help of an army of voluntary enumerators.

The day, or rather night, used to be fixed after consideration of festivals, which cause movement, and a full moon assists the work. The census of 1941 was taken days beforehand, without verification on any special day. The final count, and classification by civil condition, takes a long time. The Commissioner's Report cannot be expected for two years.

The figures on p. xlvii are probably sufficient The 1921 Census showed an increase of only four million, largely due to an epidemic of influenza in 1918, causing an estimated death-roll of six million in a

few months. The 1941 Census showed an increase of 50 million, greater than the population of France Plague is still endemic, malaria and cholera take a heavy toll. In 1934–35 deaths from plague were doubled, and from cholera trebled, compared with the previous year, but very little of this mortality comes to the notice of the visitor, or even of the resident, unless he is a district officer An outbreak, once it is reported, can be quickly dealt with by inoculation, of which even the frontier tribes will avail themselves, but apathy or resignation to fate may delay local action in the villages At large assemblies of pilgrims medical and sanitary measures are taken

The greatest interest in the Census is provided by its anomalies Bengal, usually considered to be Hindu, has a majority of Muslims, and the Punjab contains nearly 4 million Sikhs, although they ruled there for eighty-five years, more than half the population are Muslims In all other Provinces Hindus predominate, but there must always be some doubt as to the correct classification of the "Scheduled Castes" (p. lxiii). In the Muslim State of Hyderabad only one in ten professes Islam. In the Hindu State of Jammu and Kashmir Muslims number seven out of nine There are as many Christians as Sikhs

Density of population is a difficult matter to assess The most densely populated British Province is Bengal, with one person to the acre (640 to the sq m. in 1931), but a large part is under water and the great rivers, shifting their beds, restrict the habitable areas Calcutta and Howrah together hold two million and a half persons, including a shifting population in the mills and the docks which swells the provincial density. The million and a half in Bombay may be considerably reduced in the harvesting season. Figures for other cities are given in the text In the Cochin State the density was 814 to the sq. m, while in British Baluchistan a figure of 12 to the sq. m was swelled by Quetta and by other civil or military stations.

While there is a great deal of illiteracy, the figures have much improved in the last forty years The languages spoken, exclusive of dialects, number 225 There are dialects which very few speak or understand Hindustani is spoken in the United Provinces, Central Provinces and Berar Central India, the Punjab and Rajputana, but a native of Lucknow would detect a difference in the speech of a man from Delhi, and the European who has passed a high standard in Persian Urdu will probably not understand at all an admixture of Hindi in Rajputana. The names Bengali and Punjabi, Marathi and Konkani, indicate the areas in which they are generally spoken. Oriya is the language of Orissa, Pukhtu (guttural) or Pushtu (sibilant) on the N.-W. Frontier and Baluchistan. Telugu, Tamil, Kanarese or Malayali are spoken in Madras and S. India Burmese is, of course, the mother-tongue of Burma, but there are many Indians there. Only thirteen principal languages have been mentioned in this account.

RAILWAYS

TWENTY-THREE years only after the opening of the first passenger railway, the first section of the Indian system was opened (p. 36), through the efforts of Lord Dalhousie In eighty years the mileage increased to about 43,000, of which about 32,000 miles are State-owned, including 2100 miles in Burma The outlay has been 885 crores of rupees, of which 90 crores have been invested by Indian States and District Boards, indicating the value placed on this form of transport. Mysore owns 722 miles, Baroda about the same

Engineers and material for the first railways had to be imported from England The contracts with British Companies included a guarantee of interest on capital outlay, which, however, was watched by Government Consulting Engineers Surplus earnings were divisible, and there were purchase clauses, payment being made by annuities spread over a period. All the original Companies have been bought out in this manner, the last, the Madras Railway, having been acquired at the end of 1907. The Government, however, had not the staff to operate them all, and in most cases an arrangement was made with the Companies to continue working, with a greatly reduced capital, Government providing further capital for increasing equipment.

There were eight Guaranteed Railway Companies, the Great Indian Peninsula, East Indian, Bombay Baroda and Central India, Oudh and Rohilkand, Madras, Great Southern of India, Bengal Central, and the Sind Punjab and Delhi The last built a railway from Karachi to Kotri, the Indus Flotilla linked this to Multan, and the railway ran on via Lahore to Ghaziabad, junction with the East Indian near Delhi This railway was the first to be operated by the State as the North-Western Railway Bombay was connected with Madras, Ahmadabad and Calcutta ; Calcutta with Delhi and Agra , Madras with Coimbatore and Bangalore ; and Negapatam with Erode on the Madras Railway. The Nizam's Guaranteed Railway linked Hyderabad with Wadi. Dates of opening these and other railways have been given in the text.

While an actual profit on capital outlay was not shown until 1899, the benefits of railways were so marked that further extensions became imperative about 1870. At the same time it was considered that the broad gauge of 5 ft. 6 in was too costly in the less densely populated tracts and in those with physical obstacles. The State now undertook a great deal of construction with engineers of the Public Works Department, such as the Punjab Northern, the Tirhut, the Rajputana-Malwa, all on the metre gauge of 3 ft 3⅜ in The Indus Valley (completing the railway from Kotri to Multan) was to have been built on this gauge, but the materials were diverted to the Burma railway to Prome, and the broad gauge was substituted. The same gauge was used for the Sind Pishin Railway from Ruk junction to Quetta.

About 1880, however, Company agency was called in again, under

an "assisted" arrangement of various natures, often a guarantee, but the metre gauge was not used universally. The Indian Midland connected Itarsi with Agra, with the co-operation of the Bhopal and Gwalior States. The Bengal-Nagpur, also broad gauge, traversed the Central Provinces. On the metre gauge the Southern Mahratta built in the Western Deccan, the South Indian in the south of Madras, while the Bengal and North-Western constructed railways in Oudh, north of the Ganges In the systems worked by these companies were included railways constructed or acquired by the State. The Mysore Government also built railways, worked by the Southern Mahratta Company, an arrangement which may shortly cease The last "assisted" system was the Assam-Bengal (1895) now State, but there are many short lines with Indian-subscribed capital. The West of India Portuguese and the Pondicherry railways are instances of lines running through foreign territory

The last great trunk railway was the East Coast Railway, built (1893–1900) from Madras to Waltair by the State and from Waltair to Kharagpur and on to Howrah by the agency of the Bengal-Nagpur Company The Burma Railway was completed from Rangoon to Myitkyina, thirteen years after the final annexation The filling in of the picture up to the present date would be too lengthy. Indian States have taken a considerable part, Kathiawar and Jodhpur and Bikaner besides others already mentioned A connection between Balharshah and Kazipet, built by H E H the Nizam, affords the quickest route between Delhi and Madras.

About 1900 the building of railways on narrow gauges, 2 ft. 6 in and 2 ft., was encouraged Some of these were built on the N.-W. Frontier by State agency, but their capacity was overestimated and the stress during the Great War and in 1919 caused some to be converted to the broad gauge The Khyber Railway (1925) was built on that gauge, for the heaviest loading Thus, there are four railway gauges in India, a number equalled in few other countries To discuss the wisdom of this would entail entering into the "Battle of the Gauges." The two Dominions operate 17,736 miles

That Indian Railways contain many "Wonders of the World" may be an exaggeration The bridges over the Son (p 55) and over the Lower Ganges (p 474) must appear in any list of long bridges. Many more of considerable length are mentioned in the text Some have been shortened considerably by a development of technique, with which the name of Mr J. R Bell will always be connected Large training works confine the rivers to their courses, otherwise the bridges might be left high and dry Physical features of the country make gradients of 1 in 25 necessary, but very rarely, and these are operated regularly. Some railways ascend to a height of 7000 feet, a height exceeded only in the Andes and some other places The Nilgiri Railway alone is worked on the Swiss Abt Rack system.

Running speeds frequently exceed fifty miles an hour, but stops have to be frequent and thereby time is lost, so that there is nothing sensational in through speeds over long distances. Air-conditioning was introduced in 1937, the coaches are comfortable, and the tedium of a long journey may be relieved by the details of bridges given in the text. A long-distance broad-gauge train consists of 68 ft.-long bogie coaches with a dining-car attached, drawn by powerful locomotives over a track which is as smooth as any in the world The heaviest rail weighs 115 lb. per yard, heavier than in many countries, even if lighter than 152 lb in the United States Deficits were experienced in each of the years 1929-30 to 1935-36, and the competition of road transport has had effect.

POSTS AND TELEGRAPHS

In the largest cities the postal service is excellent, with motor mail vans and hourly collections and deliveries. In the small towns the service, other than local, is dependent on the timing of the mail trains, in which postal packets are sorted continuously In villages, collections and deliveries are less frequent, possibly only once or twice a week Inter-communication may be by motor-lorry or may depend on runners, who jog along, through jungle and forest, armed only with a short stabbing spear with bells hung to it by a strap, as a warning to wild animals. Within the demands of the traffic, the Post Office (which celebrated its centenary in 1937) is very efficient. It deals also with parcels, which may be sent on the Value-Payable system (1877), the cash being collected on delivery, as customs dues may be also. From 1880 money orders were introduced, the Savings Bank was taken over in 1885, and Life Insurance was instituted soon afterwards Among numerous other services performed is the sale of quinine in small packets. The earliest stamps date from 1854, and a Security Printing Press at Nasik now produces them in the country. At one time the Outward Mail from England was sorted on the steamer, but this is now done at the Ballard Pier, Bombay. There is an increasing volume of Air Mail

The Telegraph Service has been amalgamated with the Posts, but in the larger cities the Telegraph Office is usually housed in a separate building. A line from Calcutta to Diamond Harbour (1851) having proved successful, a single line was erected from Calcutta to Agra and Bombay, also to Delhi and Meerut, Umballa and Peshawar These lines were working when the Mutiny broke out In 1936 over a hundred thousand miles of line were in operation, with, on the average, five wires to the post. Over many miles, of course, there are still only one or two wires to the post. Over certain lengths copper wires enable the simultaneous transmission of several messages from each end,

and these are teleprinted. The lines are as far as possible carried along the railways for facility of inspection and repairs.

An adjunct to the Telegraph service is the Telephone system. The first automatic telephone exchange was opened in Simla in 1913, but by that time over 150 exchanges had been established elsewhere, some by private enterprise. It is possible to communicate by trunk telephone, with 1500-mile circuits, between Karachi and Calcutta, between Peshawar and Colombo, and by wireless telephone between India and England and thus to other parts of the world

Broadcasting also is under the charge of the Posts and Telegraphs. When choosing a wireless set it is necessary to bear in mind the wave-lengths of the broadcasting stations. Empire broadcasts are on short waves, approximately 13 to 20 metres Poona, Delhi, Bombay and Calcutta also use short waves between 17 and 60 metres. Peshawar and Delhi, Bombay and Calcutta, use medium waves between 200 and 370.4 metres in addition Programmes are published in the principal newspapers, and may include items in the vernacular, such as a humorous, and good-humoured, exchange of repartee between a Muslim and a Hindu All India Radio (A I.R.) has distributed sets to villages, which thus are brought into touch with the large cities and with world affairs Other stations have been erected at Madras, Lahore, Dacca, Trichinopoly and Lucknow. An "All-Wave" receiver should operate between 13 and 550 metres.

WELFARE WORK

In some quarters it is claimed that British rule has done little for the people in 150 years This would make the beginning of the period the passing of Pitt's Act in 1784, and the reader must judge for himself whether rule was well established over India at such an early date. It would be more reasonable to fix 1818, 1840, or even 1858, as the year in which that rule was sufficiently consolidated Earlier efforts to advance the welfare of part of the Indian peoples had been made. If education can be considered welfare, Warren Hastings instituted the Calcutta Madrasa Education at least is a weapon for improving sanitation by the diffusion of knowledge. Medical aid also had been considered a function of the Government, and this has been carried a step further by a Nutritional Advisory Committee, which surveys the usual diets and analyses the foodstuffs. In time a population aggregating one-sixth of that of the world may learn to benefit by this research. Hospitals and dispensaries under qualified supervision are scattered all over the country, and not only in British India. Besides the Government Medical Services there are many private practitioners, trained in Medical Colleges, or practising Indian systems of medicine.

Before her death in 1936 the Marchioness of Dufferin had seen the celebration of the Jubilee of the Countess of Dufferin's Fund, established in 1885. This Association for providing Female Medical Aid for the Women of India operates actively in co-operation with Presidency or Provincial and Local Committees to provide Zenana Hospitals staffed by women for *parda* ladies, with special attention to midwifery and diseases of women and children. Since 1921 the Government has contributed largely to the provision of a Women's Medical Service, containing many Indian women doctors The Victoria Memorial Scholarships Fund, collected in 1902 by Lady Curzon, enables midwives to be trained The Lady Hardinge College and Hospital in New Delhi was opened in 1917 as a Training College for Women In 1920 Lady Chelmsford founded the All India League for Maternity and Child Welfare, including the training of Health Visitors, who have reduced infant mortality very remarkably Then there is a Lady Reading Health School in Delhi City, and the Lady Irwin College for Women in Sikandra Road, New Delhi. Lady visitors who weary of the ancient monuments will be received cordially The wives of Provincial Lieutenant-Governors and Governors also have raised funds for the establishment of hospitals and services, with which their names are associated. The Christian Churches have established Medical Missions in many places, and their doctors work among tribes on the North-West Frontier, Gonds, and other rather primitive peoples Although their activities may not be placed to the credit of the British Government, it is probable that their efforts might not have been started, or continued with increasing effect, had not British rule given the confidence and peaceful conditions, in which alone welfare can proceed There is still an enormous amount to be done in improving public health, sanitation and water supply, with the object of reducing the scourge of malaria, and in this connection the work of the Ross Institute may be mentioned. Lady Linlithgow established a Tuberculosis Fund (1937) to relieve some 5 million sufferers It is to be hoped that the prosperity of India and Pakistan will enable them to embark on further improvement of the social services, under Indian Ministers

THE PRESERVATION OF MONUMENTS

In the early days of British rule a few efforts were made, notably by the first Lord Minto, by Lord Hastings and Lord Amherst, to save some of the most celebrated structures round Agra and Delhi from decay. Lord Canning in 1861 established the Archaeological Survey of Northern India. The function of the new Department, however, as well as of the local surveys, afterwards instituted in Madras and Bombay, was confined to the description of monuments and to antiquarian research, conservation being still left to the Local Governments, who made efforts according to the personal interests of

Governors or Lieut.-Governors, but without expert guidance. In 1871 Gen. Sir Alexander Cunningham was re-appointed Director-General of the Archaeological Survey, which had been discontinued in 1866. He had published *Bhilsa Topes* in 1854 and *Ancient Geography of India* in 1871. He was handicapped by conditions under which he worked but was a pioneer who laid foundations of success in after years.

In 1878 the Supreme Government awoke to the condition into which the national monuments were sinking, and the Viceroy, Lord Lytton, pressed for the appointment of a Curator of Ancient Monuments. After two years the post was sanctioned and held until 1884 by Major Cole, who did much towards the repair of structures, notably those in the Gwalior Fort and at Sanchi. Reaction set in. The post of Curator was abolished in 1884, that of Director-General in 1890, and a period of neglect followed. In 1895 a scheme was proposed to divide the country into circles, each with an archaeological surveyor, who was to make conservation his first duty, but without any central control. When Lord Curzon became Viceroy he threw himself into the task of organising the Department and a Preservation Act was passed (1904). The Provincial Departments were brought under the control of a Director-General, provision being made to assist out of Imperial funds. The functions and guiding principles of the Department were carefully defined. The active co-operation of rulers of Indian States, Baroda, Mysore, Kashmir and Travancore, was secured. Excellent work has been done in the Gwalior State and by Mr. Ghulam Yazdani in the dominions of H. E. H. the Nizam of Hyderabad and Berar.

Under the direction of Sir John H. Marshall, C.I.E., Litt.D., F.B.A. (1902-31), the more important groups of monuments, besides others throughout India and Burma, have been systematically put into repair. On the "beaten track" the Taj Mahal at Agra, the Fort, the tomb of Itimad-ud-daula, the Chini-ka-Rauza and Akbar's tomb at Sikandra have been renovated and the surroundings cleared. At Delhi the Palace in the Fort, the tomb of Humayun and very many other buildings have received attention. At Lahore the Fort, the mosque of Dai Anga and the tomb of Jahangir at Shahdara have been conserved. To these Muslim monuments may be added those less accessible at Mandu and Dhar in Central India, near a favourite route, at Ahmadabad and Bijapur in the Bombay Presidency, at Gaur and Pandua in Bengal, and at Rohtasgarh in Bihar.

Among Buddhist and Hindu monuments may be mentioned the topes at Sanchi and Sarnath, the temples of Khajraho in Bundelkhand and of Bhubaneshwar in Orissa, the city of Vijayanagar, the temples of Conjeeveram and Vellore in the Madras Presidency. In Burma the royal palace and monasteries at Mandalay and the pagodas of the ancient city of Pagan have been cared for. The Mutiny monuments at Lucknow may complete the enumeration.

Not content with the conservation of visible remains, the Department has undertaken excavations to uncover remains which had been buried for centuries. At Taxila in the Puujab, Bhita and Sarnath near Benares, Harappa and Mohendojaro in the Indus valley, added to which excavations at Rupar and Maski (in the Raichur district) and at Maheshwar have extended knowledge of the "chalcolithic" period, also at Hmawza (old Prome) in Burma, and indicate how far and wide the activities of the Department have been carried on Economic reasons have curtailed further work, but time was perhaps needed to digest the results Many new museums have been opened to display the finds, and a visit may well be rounded off by an examination of the exhibits, systematically arranged and catalogued, apart from those already housed in the older museums or homes of scientific Societies.

A description of all the Indian museums is given in *The Museums of India*, published by the Museums Association, Chaucer House, London, W C 1. The existence of a museum is shown in the Directory. It is, however, necessary to enquire about the hours or days of opening or closing.

"Revealing India's Past" (Royal Indian Society) should be consulted.

GLOSSARY OF THE PRINCIPAL VERNACULAR TERMS USED IN THIS BOOK.[1]

[A signifies Arabic, H. Hindûstáni or Hindi, K Kanarese; Mal Malayálam, M. Mahrátti, My. Malay; P. Persian, S Sanskrit, Sin Sinhalese, Tel Telugu; Tur. Turkish, T. Tamil.]

ABDAR, P. the wine waiter who formerly blended and cooled water (A s).

AMÍR (Ameer), A. "commander," a title of Princes and nobles, as the Amírs of Sind, and formerly of Afghanistan.

ANÁ (Anna), H the 16th part of a rupee.

ANIKUT, T weir, dam (*annai kutta*)

ANJUMAN, P. assemblage, society, institute.

ÁRÁMA, S. and Sin., a pleasure-garden or park.

BABÚL, H. a thorny mimosa (the *Acacia arabica* tree), in N. India named the Kikar

BAHÁDUR, P. "brave," "chivalric," a title of honour among Muslims.

BANA, Sin. reading of the sacred books in public

BAND (correctly, bandh) H an embankment or dyke—commonly Bund.

BANDAR, P a port or harbour

BANYAN-TREE, the Indian Fig-tree (*Ficus Indica*, or *Ficus Bengalensis*, L.) which has aerial roots.

BÁOLÍ, H a rectangular well with steps and galleries

BARADARÍ, H (twelve doors), a summer house, a mansion.

BÁZAR, P a market or market place, a street of shops.

BEGAM (Begum), Tur. a lady of rank; a Queen or Princess

BEL, H a fruit tree (*Ægle marmelos*)

BHATÁ (Bhata or Batta), H. allowance given on field service or to public servants on duty at a distance from headquarters

BUNGALOW, H (bangala), a house of one storey with verandahs; often designed like a tent.

CASTE, class; sect, corruption of the Portuguese *casta* or race

CATAMARAN, T *kattu*, "to bind" *maram*, a tree, a log raft on which the natives of Madras paddle through the surf

CHABUTRA, H a raised platform, usually of stone or brick; terrace.

CHADAR, H (Chadar) sheet worn by men and women

CHAITYA, S a Buddhist chapel or church; primarily a heap or tumulus; also a place of sacrifice or religious worship, any building of the nature of a religious monument (Fergusson, *Ind. Arch.*).

CHAKRA, S. a wheel, the wheel of the Buddhist law.

CHAR, an alluvial formation, as an island in a river.

CHAUKIDAR (Chokidar), H a watchman, by day or night.

CHAURÍ, H a fly-whisk; a mark of rank.

CHÁWADI, Tel a rest house for Indian travellers, English corruption *Choultry*.

CHHATTRÍ, H (Chhattar) umbrella; insignia of rank, a monumental structure or pavilion erected in honour of a person of rank.

CHÍTAL, H. the spotted deer (*Axis maculatus*), gregarious, and common in many parts of India.

CHUNAM, T. an English corruption of H. *chúnd*, lime, a plaster or mortar sometimes made of powdered shells of a remarkable whiteness and brilliance.

[1] Terms relating to religious matters, festivals, etc., which are explained in the Introduction, are generally not included here.

COMPOUND, an enclosure, perhaps a corruption of the Malay word *Kampong*.
CRORE (Karor), H 100 lakhs or 10 millions.
DAGOBA, a Sinhalese word from Pali *dhatugabbha* and S. *dhatugarbha* = relic-receptacle, strictly a *stupa* containing relics of Buddha
DÁK, H Post. Dak-Bungalow (or Musáfar Khana), a staging or rest-house for travellers.
DÁKGÁRI, H stage-coach, for one or two travellers; mail train.
DARBÁR (Durbar), P a royal court; an audience or levee; a hall
DARGÁH, shrine; place of burial of a Muslim saint.
DARWÁZA, P. gateway, door
DEODÁR, the *Cedrus deodara* of the Himalaya from *deva-daru*, the "wood of the gods."
DHARMSÁLÁ, H and M (*dharma*, "justice," "piety," and *sálá*, "a hall"), a place of accommodation for travellers and pilgrims.
DHARNA, S. to sit at a door fasting to death until payment is extorted (an offence under the Penal Code)
DHOLI, H *Dhooli* (properly *dolí*), a swinging cot or litter suspended from a pole carried by bearers.
DHOTI, H a loin-cloth
DIWÁN, P. "a royal court," "a minister," especially the chief financial minister
DÍWÁN-I-AM, DÍWAN I-KHAS, P hall of public, private, audience.
DOÁB, the country between two rivers.
DWÁRPÁL, H. a door-keeper, commonly sculptured at sides of doors in Buddhist shrines and Hindu temples
EKKA, H a pony cart
FAKÍR, A a religious Muslim who has taken a vow of poverty, a poor man, also inaccurately applied to Hindu devotees and ascetics
FARMÁN, P a royal order or grant
GADDÍ, H seat, royal seat; throne of a Hindu Prince.
GAMA, Sin. (grama, S.), village.
GARUDA, a fabulous bird, the vehicle of Vishnu
GHARÁ, H an earthen water-pot or jar.
GHARI, H a carriage (Tikka, for hire).
GHÁT (Ghaut), S *ghatta*, "a landing place," "steps on a river-side"; a mountain pass; a range of hills
GIRI, S.), hill, rock.
GIRJA (Port), church from Portug. *igreja*.
GOPURAM, H the pyramidal gateway of a Dravidian temple
GOSAIN, H. Hindu monk or devotee
GUMBAZ, P. a cupola; a dome.
GURU, H. a spiritual adviser.
HAJI, P. a Muslim who has performed the pilgrimage (*haj*) to Mecca.
HAMMÁL, A a bearer of a *palki*; in Bombay, an orderly or house-bearer.
HAMMAM, P. bath
HARÍM (harem), P a sanctuary, ladies apartments.
HAUZ, A. cistern, tank, reservoir.
HAVILDÁR, H. "one holding an office of trust", an officer in Indian Infantry corresponding to a sergeant; also Havildár Major.
HUKKA (Hooka), A. a native pipe.
HUZÚR, A. the royal presence; a respectful term applied to high officials.
IDGÁH, P. an open enclosure on the W of a town where the Id prayers are offered.
IMÁMBÁRA, P. a building to which the Shias carry the *tazias* or biers in the *muharram*, often the tomb of the founder.

ISHWAR or ISWAR, S. God, Lord, attribute of a Hindu deity.

JÁGÍR, P. a tenure by which the public revenues of an estate or district were granted during pleasure or for life to a jagirdar, with powers to collect, and to administer the general affairs of the estate.

JAM'ADÁR, A. an Indian officer next to a Súbadar, and corresponding to lieutenant.

JHATKA, H. covered pony cart in S. India.

JHÍL, H. pool, lake, swamp

JOGI, S. a Hindu devotee, as Fakir is a Muslim.

JOHAR (Jauhar), H. sacrifice or immolation practised by Rajputs to avoid capture. Scholars will recall the occurrence of such sacrifices at Saguntum and Numantia.

KABR, A. a tomb (Muslim); Kabristan, cemetery

KACHAHRÍ, H., commonly Cutcherry, a court or office for public business

KALIMA, A. (in full, Kalimat ul-shahadat, the word of testimony) the Muslim declaration of faith

KANDA, Sin. mountain.

KANKAR, H. nodular or block limestone, with which roads in N. India are often metalled

KARBALA, A. designation of cemetery or place where *tazias* are buried, derived from the city on the Euphrates where Husain, son of Ali, the 4th Imam, is buried.

KHÁN, A. a Muslim title of respectability answering to "Esquire."

KHÁNSÁMÁ, P. literally "master of the household gear" = butler, or house-steward. In Upper India it is the title of the chief table-servant and provider, always a Muslim. In N. India and Kashmir, it means the cook. In the Madras Presidency and S. India, this title is not used: "butler" is general, and he is seldom a Muslim.

KHIDMATGÁR, A., P., the "service-doer," always applied to a Muslim waiter at table.

KIBLA, A. the place to which Muslims look when praying, *i. e.* in the direction of the Ka'ba at Mecca

KIL'A, KILADAR, P. fort, commandant of fort.

KIMKHWÁB (Kincob), P., H. gold brocade.

KOTHÍ, H. residence, house, mansion.

KOTWÁL, KOTWALÍ, P. police officer, police station.

KULAM, T. tank. see Teppa Kulam.

KULÍ (Cooly), T. and Tur. a labourer; porter at railway stations and elsewhere

KUND, S. a pit, hollow, pool, well, small tank.

LÁKH (Lac), S. the number 100,000. By customary use "a lakh" means "a lakh *of rupees*" (= £7500 at Rs. 13 to the £).

LÁT, H. a stone monolithic pillar = *stambha*, common to all styles of Indian architecture

LINGAM, S. (Linga) symbol of Siva as the God of reproduction; phallus.

MAIDÁN, P. plain, open space, field of battle

MAKBARA (P. from *Kabr*), grave of a saint.

MAMLATDÁR, subordinate revenue collector in Bombay.

MAN (Maund), H. a weight, varying in different parts of India. In Bombay it is 25 lb.; in Bengal, since 1883, 82 lb.

MANDAPAM, S. a pavilion or porch in front of a temple, also Mantapam. Mahamandapam, etc.

MASJID, A. mosque (place of prostration, *sijda*). Jámi Masjid, congregational mosque, used on Fridays.

MASNAD, P. cushion, throne of a Muslim prince.

MASULA, T. a boat sewed together, used for crossing the surf at Madras.

MATH, H. Hindu monastery, of which a Mahanth is Abbot.
MAULVI, A. one who can read and write Arabic.
MELÁ, H. a fair.
MIHRÁB, A. an arch; the recess in the wall of a mosque on the side nearest Mecca, to which Muslims turn at prayer—usually termed Kibla.
MIMBAR, A. the pulpit in a mosque, the preacher stands on the middle step of the three while delivering his sermon (Khutba).
MONSOON, A. a corruption of the A *mausim*, "a season"; applied to seasonal rains in India during the S W. monsoon, from June to September, or N E. on the Coromandel Coast later
MUEZZIN, A. one who calls Muslims to prayer from the minaret (Azan).
MUFASSAL (often written Mofussil), separate, detailed, particular: commonly meaning "the interior of the country," as distinguished from the towns.
MUNSHÍ (Moonshi), A a writer; a secretary; a teacher of languages
NÁIK, S. corresponding to a corporal in Indian Infantry, an ancient Hindu title of a governor.
NANDI, S bull; vehicle of Siva, often carved in kneeling attitude facing Saivite temples
NAUBAT KHÁNA, NAKKAR KHÁNA, A. the chamber over a gateway, where a band is stationed for ceremonial music
NÁUICH (Nach), S a dance, an exhibition of dancing-girls
NAWÁB (for nuwwāb), A this word means *lit* "deputies, being the plural of *nā'ib*, "a deputy" It is a title conferred on Muslims.
NIZÁM, A. *lit.* arrangement; an administrator, a title of the Prince whose capital is Hyderábad, in the Deccan.
NULLA, H properly Nalá, "water-course," or "depression"
PAGODA (origin obscure) "an idol temple" in S. India, also a coin formerly in use = 3½ rupees, called by Indians *hún*, but deriving the former name from its showing a temple on one face
PALANKEEN (PALANQUIN), H an Anglican corruption of the word *pálki*, a means of conveyance, of the shape of a long box with sliding sides, in which persons were once carried for long distances on men's shoulders
PÁLEGÁR (Polygar), T Tel. a shareholder; a landed proprietor A title of persons in the Madras Presidency who correspond to zamindars in other parts of India.
PAN, S. the leaf of the betel creeper Pan-supari is areca nut rolled in betel leaf with a little shell-lime for chewing.
PANDIT, a Brahman, proficient in Sanskrit.
PARDA, P, H. a curtain, especially one that screens women; *pardanashin* = one sitting behind a curtain—*i.e*, secluded
PARGANA, a sub-district see Tahsíl.
PATEL, S the headman of a village, invested with some magisterial and revenue functions
PEEPUL (Pipal) S, H a great fig-tree (*Ficus religiosa*), or Bodhi tree
PEON, from the Portuguese *peao*, Spanish *peon*, "footman."
PESHWÁ, P. the Brahman Prime Ministers of the Rájás of Sátárá, and who afterwards became hereditary Chiefs of the Mahrátta nation.
PHINS, T. the Toda name for the stone circles on the Nílgiri Hills.
PICE, H. a corruption of the word *paisá*, a copper coin, of which 64 go to a rupee, and 4 to the anna, and which itself contains 3 pie.
PILIMAGÉ, Sin. image-house.
PINDÁRI, M. (Pendhara), organised bodies of raiders and robbers.
PINJRAPOL, H. (*pinjra*, a cage), an animal hospital, mostly maintained by the Jains; animal infirmary.
PINKAMA, Sin. merit-act; entertainment.

PÍR, P. old; a Muslim saint.
PIRIVEN, Sin. series of monks' cells.
PRÁKÁRA, a great corridor between a temple and the surrounding wall.
PURA, S and Sin. (PURAM, T.), a town, or city.
RAI SAHIB or BAHADUR. RAO SAHIB or BAHADUR: titles conferred on Indians.
RÁJÁ, MAHARAJA, MAHARAJA DHIRAJA, S. a Hindu King or Prince.
RANÍ, S the wife of a Rájá; a Queen or Princess.
RATH, S a chariot formerly, now refers to car used for Hindu gods on ceremonial occasions
RATHS or RATHAS, the name given to rock-cut monolithic Dravidian temples at Mahabalipuram, near Madras
RISÁLDÁR, A. a captain of a troop of Indian Cavalry.
RISÁLDÁR MAJOR, the senior Indian cavalry officer
ROZA (Rauza), A a tomb in an enclosure, originally the garden at Medina adjoining the chamber (hujra) in which Muhammad was buried.
RYOT, A a corruption of the A. word *ra'iyyat*, a subject, a peasant
SADR, A (Sadar, Sudder), top, chief, principal
SADR 'ADÁLAT, A formerly the Chief Court of Justice in India
SÁHIB, A. lord, a title applied to an English gentleman in India.
SAIYID, A a descendant from the daughter of Muhammad
SAMÁDH, H. cenotaph of a Hindu, also self-immolation.
SANDAL, A. and S the fragrant wood of the *Santa'um album*, L.
SANGAM, S junction of two or more rivers—commonly a sacred place of pilgrimage
SANGHÁRAMA, a group of apartments for a community of monks, a monastery.
SARAI, P. a rest-house for travellers, a caravanserai
SÁRÍ, H, a robe worn by Hindu women
SATÍ (Suttee), S a chaste wife, especially one burnt with her deceased husband; the burning of such a wife
SHÁH, P. a King; a title usually applied to the King of Persia.
SHAIKH, A old, respected; a class or rank of Muslims
SHANKH, S a conch shell, large specimens of which are blown as horns by the Hindus during religious ceremonies
SHIKÁR, SHIKARI, P game, shooting; Indian gamekeeper.
SHOLA, T a patch of jungle; a wooded dell or copse
SIKRA, S. (Sikhara) spire or finial of Hindu temple, pyramidal, many storeyed; always surmounting the cell of the image
SINHÁSAN, S a lion seat (*singh*, lion), Hindu throne
SIPÁHÍ, H (Sepoy), an Indian soldier, one of a *sipáh* or army
STAMBHA = LÁT (*q. v.*)
STUPA (or TOPE), a relic-shrine; a monument containing relics; or a tower commemorative of an event or sacred spot (Fergusson)
ṢÚBADÁR, A Governor of a Province; an Indian infantry officer corresponding to a captain.
SÚBADÁR, MAJOR, the senior Indian officer in Infantry.
TAHSÍL, P. a division of a Zilla, equivalent to Taluk, etc.
TAHSÍLDÁR, P. an Indian sub-collector of revenue, who may also be a magistrate.
TAIKHANA (P. *tah-khana*, lower house), underground room for retreat in summer, P. *sardáb*.
TÁJ, P. a crown.
TALE, Sin. a tank.
T'ALUK, A. or more properly *ta'alluk*, a tract, or subdivision of a district.

TANK, a reservoir, an artificial pond or lake, made by excavation or by damming (a word of both Indian and European origin)
TAPPÁL, H. in Bombay the post; and in Madras a relay of horses.
TÍRTHA, S. a ford; a bathing place, especially one to which religious pilgrimages are made.
TATTÍ, M. matting; a mat-shade.
TEPPA KULAM (*South India*), a tank surrounded by steps, with usually a temple in the centre, on which the deity is rowed on a raft.
THÁNÁ, a police-station; THÁNADÁR, the officer in charge of it
TIFFIN, luncheon, a word of hybrid and uncertain origin.
TIRTHÁNKÁR, S Jain saint
TONGÁ, H. a low-seated two-wheeled vehicle drawn by a pair of ponies
TRIMURTI, the three-faced bust of Siva in the characters of the Hindu Trinity.
TRIPULIA, H a gateway, or approach with three arches
TUGHRÁ, A an ornamental character of writing, used for royal signatures and titles, also Nashki or Nastatalíq styles.
TULSI, S. the *Ocimum sanctum*, the sacred Basil plant, venerated by the Hindus.
VÁHANA, S. the vehicle of a Hindu god.
VIHÁRA, S a Buddhist monastery, or an apartment or hall in a monastery or cave in Ceylon, a Buddhist temple; a meeting hall of monks.
VILA, Sin. (VILEI, T.), a pond
VIMÁNA, S. the principal part, the actual temple itself; has a pyramidal roof, and contains the cell for the image or emblem of the Hindu god.
WAPI or VAPI, S and Pali, a tank.
WAZÍR, A. a prime minister.
WEWA, Sin. a tank
ZAMINDÁR, P a landed proprietor, a land lord.
ZANANA, P. women's quarters—commonly Zenana.
ZIÁRAT, A. pilgrimage, and hence a burial-place, a place of Muslim pilgrimage
ZILʻA (Zilla), A a portion, division, or district; hence, the area or tract constituting the jurisdiction of the District Officer—*i.e.*, a Magistrate and Collector, or a Deputy Commissioner

PRONUNCIATION OF INDIAN WORDS

Consonants are pronounced as in English. *Ch* should be sounded as in "church," and *dh* and *th* as in "woodhouse" and "boathook." In the Bombay Presidency *d* as written is in certain circumstances pronounced almost like *r*; *e.g.* Madmad (Manmar)l Anhilwada (Anhilwara), Mahanwada (Mahanwara), and such proper names as (Ghorpade Ghorpuré).

Vowels are ordinarily pronounced as in Italian; thus, *pul*, *Mir*, *Mūl* and *nou* have their English equivalents in "bull," "peer," "pool," and "now." *Ai* has the vowel sound as in "mine," *ou* (Oudh) as in "proud" A long *ā* is pronounced as in "father," *e.g.*, Rām, Mahārājā; and a short *a* like *u* in "but," *e.g.*, Akbar (Ukbar), parda (purda) The accent is distributed almost equally on each syllable.

For the pronunciation of Burmese names, see pp. 682-3.

ETYMOLOGY OF SOME PLACE-NAMES IN INDIA.

Meanings of some of the *more common component* parts of place-names, other than those mentioned in the Glossary, p. cxvii For some Burma place-names, see pp. 682-3; and for certain Ceylon place-names, see p. 722.

For references to languages, see p cxvii

ABÁD, P peopled.
ASRAMA, S hermitage
ACHALAM, T hill
ARU, T river
BAGH, BAGHICHA, P garden
BAN, H grove
BARI, BAṬÍ, H house
CHERUVA, Tel tank
COIL, COILA, COLLE, COLLAH See KOT.
DIGHÍ, H tank
DHARO, Sindh river
DIH, P village
DONGAR, M. hill.
DRUG, DURGA, T, Tel fort.
ERI, T. tank
GANJ, H mart
GACHÍ, H grove.
GARH, H fort
GHAR, H. house, habitation
GIRI, S hill.
GOTH, Sindh, village.
GRÁM, GRAMAM, GAON, H village
GUDDI, K hill
GUHA, S cave
GUNTA, Tel tank
HAT, H. market
ISVARA, S lord.
KADU, T. forest
KERE, K. tank.
KHAL, H. channel
KHAND, S. portion
KHIND, M. pass.
KHET, H. (KSHETRA, S.) field.
KHET, S. small town.
KILO, Sindh, fort
KOVIL, T temple
KOT (S.), KOTA (Tel.) KOTTAI (T.), KOTTE (K.), fort
KOTAI, P. kol or pass
KUPPAM T hamlet
MAHAL, H (from Ar mahall), quarter
MALAI, T hill or range.
MANDALAM, T tract or country.
MANDI, H market.
MANE, K habitation
MANGALAM, S happiness
NAD, T tract of country
NADI, H river
NAGAR (S.), NAGARAM, town
PAHÁR, H, PAHAT, Sindh, hill
PALAIYAM, T PALEM, Tel petty kingdom
PALLI, P, PALLE, Tel village
PARA, PARI, H quarter of a town.
PATI, S lord.
PATAM, PATAN, PATANA, PATNA, PATTANAM, S. etc., town or city.
PET, PETA, Tel, PETTAI, T quarter of a town
SHAHAR, P city
SOT, H spring or stream
STHANA, S., STHAN, STHAL, STHALI, THAN, TAN, place
TALAO, P pond.
TOTA, Tel., TOTTAM, T. garden
UR, T., URU, Tel. village
VARAM, T. village.
VANA, Tel., VANAM, T grove

(8) APPENDIX

To 1st January 1949

During the Second World War, Indians held nearly all the seats in the Viceroy's Executive Council Field-Marshal Viscount (now Earl) Wavell of Cyrenaica and Winchester, Commander-in-Chief since 1941, was Viceroy and Governor-General from 20th October 1943 to March 1947 An 'Interim Government was formed in 1946, and by a Convention decisions by voting (abandoned by the Act of 1786) were resumed.

Rear-Admiral Viscount (now Earl) Mountbatten of Burma, K G , assumed the office of Viceroy and Governor-General on 24th March 1947, and energetic steps, meeting Muslim demand, established Partition into two Dominions, which as India (Hindu) and Pakistan (Muslim) came into being on 15th August 1947 (page cii), Lord Mountbatten remaining Governor-General of the former. A Boundary Commission allotted parts of Bengal and the Punjab to each Dominion, Sylhet acceding by plebiscite to Pakistan Both Dominions have been elected to the United Nations, and constituent Assemblies in both will frame Constitutions

Bapu M K Gandhi was murdered by a Hindu at Delhi on 30th January 1948 and later in the year "Untouchability" was abolished by the Indian Assembly

The capitals are Delhi and Karachi Earl Mountbatten retired in 1948 and was succeeded by H E Chakravarti Rajagopalachariar Quaid i Azam Muhammad Ali Jinnah, first Governor-General of Pakistan, died in September 1948, and H E. Khwaja Nazim ud din succeeded

The flag of India displays three horizontal stripes, saffron, white and green, with a Buddhist wheel in the centre , that of Pakistan is three-quarters green with a silver crescent and star, one-quarter white

Most of the Indian States have acceded to one or other Dominion, the accession of Kashmir and Jammu having been referred to the United Nations for settlement by a plebiscite.

A Burma Treaty was signed on 17th October 1947, and an Independence Act received the Royal Assent on 10th December following

The Dominion of Ceylon was inaugurated on 4th February 1948.

1.—BOMBAY AND THE ENVIRONS *

[*Maps face pages 18, 24 and 34*]

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History[1].—There is little doubt that the W. coast of India had trade relations with the Assyrian, Persian, and Roman empires; but the direct connection of modern Europe with it dates only from the arrival of the Portuguese in 1498. Albuquerque conquered Goa in 1510, and Sultan Bahadur Shah, of Gujarat, in 1534 ceded Bassein, Salsette, and Bombay to the Portuguese. In 1626 the Portuguese buildings in Bombay were raided and destroyed by a combined English and Dutch force. In 1661 Bombay was ceded to England as part of the dowry of Catherine of Braganza, but owing to disputes with the Portuguese Viceroy, the actual possession of it was not transferred till 1665, and on the 23rd September 1668 it was made over to the East India Company by King Charles II. to be held at an annual rent of £10 in gold "as of the manor of East Greenwich, in the county of Kent, in free and common soccage." One of the terms of the transfer was that the English should support the Portuguese in India against the Dutch, who were rapidly supplanting them everywhere.

The name was supposed to be a corruption of the Portuguese Bom Bahia or Fair Bay. But the vernacular name *Mumbai* (see

[1] Selected literature—*Bombay in the Making*, by P. B M. Malabari (Unwin, 1910); *By-ways of Bombay*, by S. M. Edwardes (Bombay, 1912); *Glimpses of Old Bombay*, by J. Douglas (Sampson Low, 1900); *The Charm of Bombay*, by R. P Karkaria (Bombay); *Bombay* by S. T Sheppard (1932, Rs. 5), *One Hundred Years of Bombay* (Chamber of Commerce, 1938); *Gateway to India*, by A R. Ingram. For up-to-date statistics the "Times of India" Year Book should be consulted.

f.n., p. 20) suggests that it was originally called after the Koli goddess Mumbai, or Mumbabai, who still has an important temple and tank in the heart of the Indian quarter. She is a form of Amba Bhawani, or Parvati, the consort of Siva.

At the time of the transfer from the Portuguese, Bombay consisted of seven islands, separated at high tide by the sea which, at low tide, left a wilderness of malarious mud-flats. Dense coco-nut plantations covered it, and the inhabitants were chiefly fishermen and toddy-drawers, respectable Hindus and Parsis shunned it on account of Portuguese intolerance. Its unhealthiness was notorious: 17th-century travellers speak of it as "a charnel-house" and mention a contemporary proverb, "two monsoons are the life of a man." The gradual transformation in drainage and reclamation of this pestilential swamp into the great city of today, which proudly styles itself *Urbs prima in Indis*, has been the work of many hands, but the chief credit is due to Gerald Aungier, the real founder of Bombay, who, by his policy of toleration, induced the Parsis, Banias, and other mercantile communities to settle under the protection of the British flag. The Parsis first came to Bombay in 1670.

In 1665 Bombay Castle mounted 4 brass guns, in 1674 120 pieces of ordnance, and had a garrison of 300 English, 400 Portuguese, and 500 militia. In 1687 the Presidency was finally transferred from Surat (p 189) to Bombay. The first four Governors held Bombay for the Crown. After the transfer to the East India Company, except for occasional visits and during three years (1672-75) of the rule of Gerald Aungier, the Governors of Bombay spent almost the whole of their time at Surat, of which factory they were Presidents. During their time Bombay was administered by an officer styled Deputy-Governor; this title fell into disuse between 1720 and 1738.

In 1708 it became the trading headquarters of the Company on the W. coast, Surat being no longer a safe place. Before 1720 the town, outside the castle, contained a population of 50,000, and was enclosed by a wall built by Governor Boone (1715-22). It already possessed a mint; a bank was founded shortly afterwards, and the port flourished considerably from the encouragement given to the China trade. About the middle of the century the town was refortified, and came into prominence in connection with the suppression, in 1756, of the Angre pirates by Admiral Watson and Colonel Clive, on their way to the Coromandel Coast, a position which was ultimately confirmed by the results of the struggle of the Company with the Mahrattas, who in 1739 had taken Bassein and Salsette from the Portuguese.

On the Portuguese preparing to recover Salsette (1774), the island was seized by the Company and retained after the Peace of 1776. Although surrendered by the Convention (Armistice) of Vadgaon (1779), the fulfilment of this was avoided by the arrival of General Goddard with troops from Bengal. After Bassein had been captured in 1781, these acquisitions remained with the British by the Treaty of Salbai, confirmed 1783.

From that time the development of the port and city proceeded steadily apace. The city was visited by General Wellesley (the Duke of Wellington) in 1804, and to his instance was due the first road practicable for artillery up the Bhor Ghat and to Poona. It seems certain that it must have been visited by Lord Nelson while a midshipman, in 1775, as the *Seahorse*, on which

he made his first cruise, was in the Persian Gulf and at Bombay in that year.[1]

The framework of administration of the Presidency and its Capital was shaped by Mountstuart Elphinstone in 1819-1827. The Chamber of Commerce was established in 1836, the Bishopric in 1835, and the Bombay Bank (which is now merged in the Imperial Bank of India) in 1840; the University was created in 1857, and the Legislative Council in 1862, the Municipal Authority, formed in 1872, was converted into a Corporation in 1888. The Port Trust was constituted in 1873, and the Bombay City Improvement Trust in 1898. The mail service with England was undertaken by the P & O. Company in 1852; the G.I.P. Railway, which had been opened as far as Thana in 1853, was extended up the Ghats in 1863, and in the same year the Bombay Baroda and Central India Railway, part of which had been opened in 1860, was extended to Ahmadabad

The four most remarkable developments since 1850 have been (1) the reclamation of land; (2) the construction of docks (p. 20); (3) the development of cotton mills (the first founded in 1853); and (4) the erection of a splendid series of public buildings, many due, as will be seen below, to the munificent charity of private persons. The constructive stage may be said to have begun during the Governorship of Sir Bartle Frere (1862-67), when the American Civil War poured immense wealth into Bombay in connection with the export of cotton, and over-speculation was followed by a severe financial collapse. At this date the old fort walls were at last removed.

The castle guarding the harbour front yet stands, and fragments of Fort George, which stood at the Northern end of this front, survive in the grounds of the European General Hospital. On the S. side the defences followed the line of Rampart Row from the Apollo Gate to the S.W. corner, and then that of Esplanade Road, passing the Church Gate and Hornby Road, to the N.W. corner and the Bazar Gate, whence they turned E. to Fort George. Outside the W. defences was a fine esplanade, and in the centre of the fort was the green on the site of which Elphinstone Circle now stands.

Modern progress is associated with activities of the Corporation, the City Improvement Trust, and the Development Directorate As in the case of New York, the area for expansion is limited, and the provision of accommodation for a growing population presents a constant and insistent problem. The population has risen from 150,000 in 1800 to 1,489,883 at the latest census of 1941. It was then classified as follows. Scheduled Castes, 14,000, Hindus, 899,000, Muslims, 251,000; Jains, 33,000; Indian Christians, 78,000, others, 106,000.

The Corporation, under a Municipal Commissioner, consists of a hundred and six members, seventy-six elected from different wards of the city, four elected by the Chamber of Commerce, the Indian Merchants Chamber and Bureau, the Mill-owners' Association and the University, sixteen nominated by Government, and ten co-opted by the elected and nominated members. Inside the Corporation, which is a deliberative body, are two statutory committees: (1) the Standing

[1] In Lord Nelson's original letter of thanks to the East India Company for the gift of £10,000 voted to him after the Battle of the Nile (dated 3rd July 1797, and written on board the *Foudroyant* at Naples), he says, "Having *in my younger days* served in the East Indies, I am no stranger to the munificence of the Honble. Company" This letter may be seen in the Library of the India Office. It is reproduced in Douglas's *Bombay and W. India*.

Committee consisting of sixteen members, twelve elected by the Corporation and four nominated by Government, which is practically the Finance Committee of the Corporation, and (2) the Schools Committee consisting of sixteen members, twelve elected by the Corporation from its own body and four, of whom two must be women, from outside. The Municipal Commissioner appointed by Government exercises supreme executive authority in all municipal matters excepting primary education, in respect of which the entire executive authority is vested in the Schools Committee

The cotton mills, which next to the overseas trade at the docks employ the major portion of the population, are, with one or two exceptions, situated in Parel, at the N. end of the city

The Electric Supply and Tramways Company (1905), a Gas Company and Telephone Company provide modern amenities.

The City Improvement Trust was created by a special Statute in 1898 for the purpose of improving the sanitation of the city and developing new residential areas The work is carried on since 1933 by the Corporation

The Development Directorate was created by the Government of Bombay in 1920, with the object of providing for the development of the City of Bombay and of relieving congestion and overcrowding. The programme originally planned was as follows (*a*) The provision of 50,000 one-roomed tenements for the working classes; (*b*) reclamation of 1145 acres in Back Bay and of 132 acres in the harbour, on the west and east of Colaba Point, by pumping silt across a narrow neck; (*c*) the development of South Salsette, partly for residential and partly for industrial purposes; (*d*) the provision of other industrial areas at greater distances; (*e*) the improvement of communications to the suburban areas; and (*f*) the improvement of the supply and transport of building materials. The "Back Bay Scheme" did not prove a success. Engineering difficulties and the high prices which prevailed after the war materially upset calculations, while the expected demand did not arise. After an enquiry in March 1926 it was decided to proceed with four blocks at the Northern and Southern extremities The sale of the southernmost block, No 8, near Colaba, to the Government of India brought in a large sum. Government have leased parts of Blocks 1 and 2 for new offices on Queen's Road

The adoption of these great proposals for the improvement of the material conditions of the City of Bombay was mainly due to the energy of the late Lord Lloyd, when Governor of Bombay.

The Governors of Bombay have been, during recent years: Lord Sydenham (1907-1913), Lord Willingdon (1913-1919), Sir George Lloyd (1919-1923), Sir Leslie Wilson (1923-1928), Sir Frederick Sykes (1928-1933); Lord Brabourne (1933-1937), and Sir George Lumley (1937-1943). Sir J Colville was installed in 1943 (reappointed 1947).

The **Island of Bombay** is situated in lat. 18° 53′ 45″, long. 72° 52′. It was originally a group of islands separated from the mainland and from one another by very narrow channels, the principal islands being Bassein, Dharave (Dravi), Salsette, Trombay (in which the hill called the Neat's Tongue, 1000 ft. high, is a conspicuous mark), Bombay, and Elephanta.

The Southernmost of these

islands was Colaba (p. 13), so called from the Koli fishermen who inhabited it. On the W. extremity, between Colaba on the S. and the bold and striking promontory of Malabar Hill or Walkeswar (p. 22), now the fashionable residential quarter, on the N., lies the shallow basin, about 3 m. broad, known as Back Bay. On the E. side, between the island and the mainland, is Bombay Harbour, a fine expanse of water, 5 to 9 m. broad. In the narrow neck of land between Back Bay and the Harbour, is the old site of the Fort, the nucleus of the city. Further N are the bazaars and mill quarters, beyond these again the suburbs (p 25).

Bombay Island is 11½ m. long from the S. extremity of Colaba to Sion Causeway, over which the G.I.P. Railway passes to the island of Salsette, and from 3 to 4 m. broad in that portion which lies to the N. of the Esplanade The area is 22 48 sq. m

Climate.—Bombay is neither very hot in summer nor cold in winter Punkahs used to be considered unnecessary but not now The coolest month is usually February The periods just before and after the S.W monsoon (May to June and October) are hot and humid, and the torrential rains of July, August and September, though cooling, are inconvenient for sight-seeing. Malabar Hill is usually several degrees cooler than the Fort, and healthier. The average rainfall is 70.30 in

Bombay Harbour.— The panorama which confronts the traveller, as he enters Bombay from the sea, has been compared to the Bay of Naples. To the W. the shore is crowded with buildings, some of them, as the Colaba Church, the Tower of the University, and that of the Municipal Buildings, very lofty. To the N. and E. are numerous islands, and on the mainland hills rising to an altitude of from 1000 to 2000 ft. Pre-eminent amongst these is the remarkable hill of Bawa Malang, otherwise called Mallangarh, on the top of which is an enormous mass of rock with perpendicular sides, crowned with a fort, now in ruins (See p. 513.)

The main defences of the harbour consist of batteries on the islands in the harbour, the *Oyster Rock*, the *Middle Ground* shoal, and *Cross Island*. The East India Company had a marine (1612) which continued as the Indian Navy until 1863. Bombay is the headquarters of the Royal Indian Navy (1934), formerly the Royal Indian Marine (1892).

Landing —The mail steamers lie alongside the mole (1918) at Ballard Pier Station, named after Gen J. A Ballard, Bo. Engrs., who was Mint Master and Chairman of the Port Trust (1872-1879) Luggage has to pass through the Custom House. Agents send representatives to meet passengers on landing, and it will be found convenient to entrust the baggage to one of them, with a detailed list of the boxes Customs forms are provided on board the steamer The Customs examination is not severe, if a fair declaration seems to have been made. Articles for the *bonâ fide* personal use of the traveller are not usually charged with duty. If firearms have not been in India before, or have not been in India for a year, a high *ad valorem* duty (50 per cent) is levied, and they cannot be removed from the Custom House until the duty and a licence fee are paid. [e]Radio sets also are liable to duty. Liquor prohibition was imposed in 1939.

The scene on landing is striking. The quaint native craft in the harbour; the crowds of people dressed in the most brilliant costumes and varied headgear; the Hindus of different castes; the Muslims, Jews, and Parsis, with a sprinkling from other nationalities; the gaily-painted bullock-carts, these make a lasting impression. Flowering trees are at their best in May

Railway Communications—The visitor who desires to proceed at once "up country" on landing in Bombay, will find two luxuriously appointed express trains, with restaurant cars and carrying first-class passengers only, awaiting his choice at the Ballard Pier Station. The Imperial Indian Mail (there is a surcharge and reservation fee) leaves for Calcutta (Howrah) about 7 hours after the mail steamer is signalled. The route taken is *vid* Itarsi, Jubbulpore, Chheoki (for Allahabad), Moghal Sarai (for Benares) and the Grand Chord line of the East Indian Railway (Route 2). and the time occupied on the journey (1349 m.) is 36 to 39 hours. Surcharge for air-conditioned coaches, introduced 1937

The other train, "Frontier Mail," runs over the Bombay, Baroda and Central India Railway, *vid* Baroda, Rutlam, Kotah, Sawai Madhopur (for Jaipur), Bharatpur (for Agra), and Muttra (Route 12) to Delhi (861 m.) and thence to Lahore and Peshawar It is claimed that this is the fastest train in India. Arrangements for accommodation in these special trains should be made in advance, either on board the mail steamer or at the P. & O office in London.

Visitors travelling by other trains proceed to either of the railway terminal stations: **Victoria** (G.I.P. Ry.) or **Bombay Central**, the terminus in Lamington Road, Byculla, of the B.B. and C.I. Ry. (opened in December 1930). The daily "Frontier Mail" runs from Bombay Central, also the Gujarat Mail between Bombay and Ahmadabad (Route 10), and the Kathiawar Mail from Bombay to Viramgam (Route 11); the two last connect with the Metre-Gauge Mail at Ahmadabad for Abu Road (Mount Abu), Ajmer, Jaipur and Delhi (Route 10).

From the Victoria Terminus ("Bori Bundar" to the taxi-driver) there are two express services daily to Calcutta; *vid* Jubbulpore (E. I. Ry.) and (Route 7), *vid* Nagpur (Bengal-Nagpur Ry.), and express to Madras, *vid* Poona, Wadi, for Secunderabad and Bezwada (Route 26); the Punjab Mail to Delhi (957 m.), and to Lahore, by way of Itarsi, Jhansi, and Agra (Route 9), also to Poona for Bangalore (p 588).

General Description of Bombay and its Suburbs—The visitor who halts in Bombay should visit Malabar Hill (from which a grand view of the Back Bay is possible), the Zoo, the Prince of Wales Museum, and the Old Fort behind the Town Hall. If he has an invitation, he can go to the Royal Bombay Yacht Club and drive to the Willingdon Sports Club near the Mahaluxmi Racecourse.

The road from the Ballard Pier, after leaving the Grand Hotel on the right and passing the Custom House, skirts the Ballard estate of the Port Trust, reclaimed by spoil from the docks, and enters the circuit of the Old Fort of Bombay just above the ancient Castle From this point Mint Road leads N. to the Victoria Terminus and onwards to the main part of the Indian city—Marine Street and Apollo Street lead S. to Rampart Row (along the S.E side of the Fort), and

the open space W. of the Apollo Bunder—and Church Gate Street leads W to Esplanade Road, which follows the landward line of the former defences, and to the Back Bay on the Western side of the Island. Church Gate Street leads to the Brabourne Stadium.

Along the shore there is free access to Back Bay, the railway, which formerly ran to a terminus at Colaba, having been removed beyond Church Gate Station Along Mayo Road, which runs parallel to it, is the range of Public Offices. S of the open space, near which all the principal hotels are situated, extends the promontory of Colaba.

Northwards, along Back Bay, Queen's Road leads to Malabar Hill, which bends round the N W side of the bay, and is continued to the N. by Cumballa Hill. E. of the two hills and of the Northern part of Queen's Road lies the Indian city, with the quarters of Byculla and Mazagon along the north side of it. In Parel, N. of Byculla is the principal location of the Bombay Mills, in Mazagon are the P & O Docks, below which, and E. of the main city, lie the Prince's, Victoria and Alexandra Docks Between the Indian city and the N W side of the Fort are a number of places of business, though several of the houses connected with the trade of the port are still situated inside the Old Fort.

Public Offices

The impressive Government buildings already mentioned succeed one another in the following order: from S. to N., the Prince of Wales Museum and the College of Science in Esplanade Road, then come in Mayo Road the Presidency Secretariat, the University Hall, Library, and Clock Tower, the High Court, the Public Works Secretariat, and the Telegraph Office.

The Presidency Secretariat (1874) is 470 ft. long, with two wings. In the first floor are Committee Rooms, Private Rooms for the Governor and Indian Ministers and the Finance Department, on the second floor General and Revenue Departments, Home on the third The style is Venetian Gothic, and the designer was Colonel Wilkins, Bo E The carving is by Indian artists The staircase is lighted by the great window, 90 ft high, over which rises the tower to 170 ft. At the entrance are the arms of Sir Bartle Frere (who was Governor when the plans were formulated for erecting public buildings, and to whom Bombay owes many of its improvements), and Sir Seymour Fitzgerald (1869-72).

University Hall — This ornate building, in the French Decorated style of the 15th century, is 104 ft long, 44 ft broad, and 63 ft high to the apex of the groined ceiling, with an apse separated from the Hall by a grand arch, and a gallery, 8 ft broad, round three sides. The painted-glass windows have an excellent effect. The Hall, designed by Sir Gilbert Scott, R.A., is called after Sir Cowasjee Jehangir Readymoney, who contributed towards the cost of erection (completed 1874) A statue by Woolner of Sir Cowasjee stands in the University Gardens and another of Mr Thomas Ormiston, the designer and builder of the Princes Dock The University was founded in 1857

The University Library and Clock Tower were designed by Sir Gilbert Scott in the style of fourteenth century Gothic. The Library is a long, low room, adorned with carving, and the

great Rajabai Tower on the W. side forms part of it, and is from its height (260 ft.) the most conspicuous building in Bombay. It was built at the expense of Mr Premchand Raichand, in memory of his mother, Rajabai. The Tower is divided into an octagonal lantern spire, with figures in niches at the angles. There are twenty-four figures in all upon the tower, representing the castes of W. India The first floor forms part of the upper room of the Library, and the second contains a study for the Registrar There is an opening in the centre of each floor, so that one can look up 115 ft to the ceiling of the Dial Room The fourth floor contains the great clock Under the dials outside are four small galleries, with stone balustrades From the top of the tower there is a fine view of Bombay On the E. are the harbour, fringed with islands, Mody Bay, and the Fort , and to the W. are Malabar Hill and Back Bay , and to the S , Colaba Point

The **High Court** was established as a Supreme Court in 1823 (Sir E West, first Chief Justice) and became a High Court in 1861 This immense building, 554 ft. long, with a tower 175 ft high, was designed by General J. A. Fuller, R.E. , it was opened in 1879 The style is Early English. The principal entrance is under a large arched porch in the W façade, on either side of which is an octagon tower 120 ft high, with pinnacles of white Porbandar stone, and surmounted by statues of Justice and Mercy. The main staircase is on the E. side, and is approached by a noble groined corridor in Porbandar stone, which runs through the building. The offices of the High Court are on the first and third floors. The Appellate and Original Courts are on the first and second floors. The Criminal Court is in the centre of the building, above the main corridor, and has a carved teak gallery for the public running round three sides The ceiling is of dark polished teak in panels, with a carved centrepiece. The floor is Italian mosaic. A number of portraits of past Chief Justices and Judges hang in the different Courts.

Next to the High Court and separated from the old Post-Office by Church Gate Street, a broad road which leads E. to Elphinstone Circle and W to the Church Gate Station of the B B and C.I. Railway, is the **Public Works' Secretariat**, with a façade 288 ft. long, the central part having five storeys The Railway Inspection, Irrigation, and other Engineering Departments are accommodated in this building

On the S side of the arm of the road leading to the W. are the **Statues** of three former Governors of Bombay, Sir Richard Temple (1877-80), Lord Reay (1885-90), and Lord Sandhurst (1895-1900). Opposite, on the corner site formed by Marine Lines and Queen's Road, is the office of the B.B and C I. Railway, which has a façade 280 ft long and a tower 160 ft high.

The **Old General Post-Office** which has been absorbed into the Telegraph Office is opposite the Public Works Secretariat in Church Gate Street and was designed in the mediæval style by Mr Trubshawe. It has three floors, and is 236 ft. long, with wings on the N. side. Part of it is used as a Post-Office for the Fort area. The **New General Post-Office** (p. 16) is near the Victoria Terminus Station.

The Telegraph office, which is now in the old Post-Office, is built in Romanesque style and has a façade 182 ft long. The facing of it and of the Post-Office is of coursed rubble stone from Kurla, in Salsette, and the columns are of blue basalt.

North of the Telegraph Office at the junction of the Mayo and Esplanade Roads, which flank the above buildings on either side, is **the Statue of Queen Victoria**, by Noble, of white marble. Most of the cost was borne by H H. the late Maharaja Khande Rao Gaekwar, of Baroda. The statue was unveiled by Lord Northbrook in 1872. Her Majesty is represented seated. The Royal Arms are in front of the pedestal, and in the centre of the canopy is the Star of India, and, above, the Rose of England and Lotus of India, with the mottoes "God and my Right," and "Heaven's Light our Guide," inscribed in four languages It was defaced, but was cleverly cleaned by Indian chemists.

Returning S. from this point to the Flora Fountain (which was erected in honour of Sir Bartle Frere), and following Church Gate Street into the area of the Fort, Elphinstone Circle, occupying the site of the old Green, is reached. In Esplanade Road, running S. from the fountain, and in Hornby Road, running N. (together marking the western limits of the Fort), are the **Bombay Club** and the principal shops and places of business.

On the N. side of Church Gate Street, in Bazar Gate Street, are the headquarters of the Chamber of Commerce, and on the S. side is the **Cathedral of St. Thomas**. This was begun by Gerald Aungier in 1672, but was not formally opened until 1718 In 1816 it was consecrated by Bishop Middleton of Calcutta, who had created an Archdeaconry of Bombay in 1814. Upon the installation, in February 1836, of Dr Carr as the first Bishop of Bombay, it became the Cathedral of the Diocese, and the low belfry was converted into a high tower. It is simple in plan, and a mixture of the classical and Gothic in style. The chancel, added 1865, is a specimen of modern Early English.

A monument by Bacon to Jonathan Duncan (1811), Governor for sixteen years, represents him receiving the blessings of young Hindus with reference to his successful efforts in suppressing infanticide in certain districts near Benares, and afterwards in Kathiawar, through the zealous and able agency of Colonel Walker Another beautiful monument by Bacon, in the form of a medallion on the E. wall, commemorates Katharine Kirkpatrick (1760), whose son, Major-General William Kirkpatrick (Resident at Hyderabad in 1797), was the grandfather of Sir Richard and Sir John Strachey. There are also monuments to Captain G. N Hardinge, R.N., who died in 1808 in a brilliant engagement, when he took the famous French cruiser *Piémontaise*. Col Burr, who commanded at the battle of Kirkee (5th November 1817), Colonel John Campbell, defender of Mangalore against Tipu in 1784 (died February 23); Commodore John Watson, mortally wounded at the siege of Thana in 1774; John Carnac (1800), who had served with Clive in Bengal, and his wife Eliza Rivett (1780), whose portrait, by Reynolds, is in the Wallace Collection in London; Admiral Maitland (1839), who received Napoleon on board the *Bellerophon*; and Major Eldred Pottinger, distinguished in the defence of Herat (November 1837 to September 1838) Bishop Carr's effigy in marble is in the south transept.

One of the chalices was the gift of Gerald Aungier in 1675, another was presented in 1632 by the "Greenland merchants of the City of York." The fountain in front of the Cathedral was erected by Sir Cowasjee Jehangir Readymoney.

Elphinstone Circle (Bombay Green) has on the E. side the Town Hall; in the middle is a well-kept garden with marble statues by Bacon of Lord Cornwallis and Marquess Wellesley. From the centre of the S. side, Bank Street leads to the **Imperial Bank of India**, formerly the Bank of Bombay

The **Town Hall**, designed by Col. T. Cowper, was opened in 1833, and the cost was partly raised by lotteries. The building has a colonnade in front, and the façade is 260 ft long The pillars in front, and the external character of the edifice, are Doric; the interior is Corinthian. On the ground floor are some of the weightier curiosities of the Royal Asiatic Society In the upper storey is the Grand Assembly Room, 100 ft. square, for public meetings and balls, the Assembly Room of the **Bombay** (branch of the Royal) **Asiatic Society**; and the **Library** of this Society, founded in 1804 by Sir James Mackintosh when Recorder of Bombay (1804-1811), containing about 100,000 volumes The place of honour in the Grand Assembly Room is occupied by a statue of the distinguished Governor Mountstuart Elphinstone (1819-1827), executed by Chantrey, as were also those of Sir J. Malcolm (Governor 1827-1830), and Sir C. Forbes, (1774-1849), a famous Bombay merchant. At the head of the staircase, on one side, is a statue, by Foley, of Lord Elphinstone, the Governor during the Mutiny, and on the other side is a statue, by Woolner, of Sir Bartle Frere, an excellent likeness. Between the circular flights of stairs is Marochetti's statue of Sir Jamsetjee Jeejeebhoy.

The Levee Rooms of the Governor and the Commander-in-Chief, and the Council Room, are no longer used. In the Library of the Asiatic Society, instituted for the investigation and encouragement of Oriental Arts, Sciences, and Literature, are busts of Sir James Rivett-Carnac (Governor 1838-1841) by Chantrey, and Sir J Mackintosh. The Geographical Room contains portraits of Sir Alexander Burnes (who was murdered at Kabul in November 1841) and the two first Presidents of the Bombay Geographical Society—Sir John Malcolm and Capt Daniel Ross, a distinguished hydrographer who was for many years (until 1849) Marine Attendant at Bombay. The collection of maps is an extremely fine one. The Geographical Society was merged into the Asiatic Society

The **Mint** is close to the Town Hall, but farther back, having a tank in front of it. It is a plain building, with an Ionic portico, designed by Major J Hawkins, and completed in 1829 Authority was granted to the Company by the Crown to establish a mint so early as 1674 The old Portuguese Quinta (Manor House) was close by Pherozeshah Mehta Road runs due E. and W. through the former Gunbow Street from Hornby Road to a point almost opposite the Mint

N. of the Mint, at the E. end of the Ballard Road, which leads to the Ballard Pier (p 7), are the **imposing Offices of the Port Trust** (p. 19). At the Junction of the W. end of Ballard Road with Frere Road, leading to the N. past St

George's General Hospital, is the Ruttonjee Mooljee Fountain.

Immediately behind the Town Hall are the remains of the Castle of the Old Fort, now used as an Arsenal. Only the walls facing the harbour and a portion of the wall to the N. now remain. There is a flagstaff here from which signals are made to ships, and also a clock tower, where a time signal-ball, connected by an electric wire with the Observatory at Colaba, falls at 1 P M.

The old Custom House (Mandvi, built 1720) contains the Collector's office S. of the Town Hall The new Custom House is near the Ballard Pier.

The Government Dockyard, constructed in 1736, by Lavji Nasarvanji Wadia, a Parsi from Surat (d. 1774) and extended 1803-10, has a sea-face of nearly 700 yds. It was here that His Majesty King Edward VII., as Prince of Wales, landed in 1875 There are five graving docks, three of which together make one large dock 648 ft. long, the other two graving docks making a single dock 582 ft. long. There are also four building slips opposite the Apollo Pier and on the S.E side of the enclosure. Bombay is the only place where the rise of the tide is sufficient to permit docks on a large scale. The highest spring tides reach to 17 ft., but the usual height is 14 ft. In the dockyard four generations of Wadias built a number of British men-of-war, but shipbuilding started in 1717 on the shore.

From the Dockyard Marine Street leads into Apollo Street and past the old Great Western Hotel (now a block of offices and formerly the High Court building) In an old ice-house here Wenham Lake ice used to be stored. St Andrew's Presbyterian Church, built in 1818, is near the open space S. of Rampart Row, W., marking the Southern side of the Old Fort. On the left here is the fine building which served as the Royal Alfred Sailors' Home.[1] The sculpture in the gable, representing Neptune with nymphs and sea-horses, was executed by Mr Bolton of Cheltenham His late Highness Khande Rao Gaekwar gave Rs.200,000 towards the cost of the building to commemorate the Duke of Edinburgh's visit, and the foundation stone was laid in 1870 by the Duke The Home, which is now too far from the Docks to serve its original purpose, was taken over (1928) by the Government, and a Council Chamber for the Bombay Legislature has been built at the back Opposite is the Prince of Wales Museum of Western India A bronze statue of His Majesty, King George V. (the gift of Sir Sassoon J. David), flanks the Museum on this side, as that of King Edward VII. (p. 14) flanks the site on the other side

The Wellington Fountain, erected in 1865 to commemorate the visits of the Duke to Bombay in 1801 and 1804, stands opposite the Sailors' Home at the junction of the Esplanade and Apollo Bunder Road. The latter road leads S.E. from the Wellington Fountain to the Apollo Bunder Pier, originally known as the Wellington Pier, passing between the Royal Bombay Yacht Club on the left hand, and Yacht Club Chambers on the right.

Situated on the Apollo Bunder, the former landing-place for pas-

[1] The building occupies part of the site of the old cemetery at Mendhams Point. This was closed in 1760 in order that a clear field of fire from the Fort might be secured, and the tombstones were razed to the ground.

sengers, is the **Gateway of India**, erected to commemorate the landing of King George V. and Queen Mary in December 1911. An iron shed, with a curved roof, after the style of a Mongol tent, formerly provided shelter while waiting on the Bunder. This shed was removed and a temporary pavilion and hall erected in white plaster for the reception. It was suggested by Lord Sydenham, then Governor of Bombay, that a permanent pavilion should be erected to commemorate the event, to form a sea gateway to India and provide a reception hall for all important occasions The scheme was carried out by his successor, Lord Willingdon The gateway consists of a central hall with great archways forming the entrance, while side halls provide seating accommodation for 600 The design (by Mr G Wittet) is Indian in character, based on the work of the sixteenth century in Gujarat The stone is yellow basalt obtained near Bombay, but the pierced stonework in the arches of the side halls, is from Gwalior State. The three halls are roofed with domes

A statue of King George V by Rao Bahadur Khatre (1938) stands on the N side

Near the head of the Colaba Causeway, running S.W from the fountain, are the headquarters of the Y.M C A , and farther S. is the Taj Mahal Hotel (1903) on the sea-shore At the corner of the causeway and the adjacent Wodehouse Road, named after Sir Philip Wodehouse (Governor of Bombay 1872-77), is the Hotel Majestic, and just beyond are the new Roman Catholic Church of the Holy Name and the official residence of the Roman Catholic Archbishop of Bombay The Causeway leads past the old Cotton Green (now removed to Sewri), and the Sassoon Dock (650 ft. long), and the first wet dock made in India), to the extreme end of the promontory of **Colaba**, formerly a separate island, with the Observatory

St John's Church, a memorial of the first Afghan War, and consecrated in 1858, consists of nave and aisles 138 ft. long, with a chancel 50 ft. long, and a tower and spire 198 ft. high, conspicuous for some distance at sea. The effect on entering is good, owing to the length and height of the building, the simplicity of the architecture, and the "dim religious light" diffused through the stained-glass windows. The roof is of teak The illuminated metal screen, light and elegantly designed, is surmounted by a gilt cross Part of the cost of the spire was contributed by Mr Cowasjee Jehangir, a Parsi, in 1864.

The "memorial marbles" are of alternate colours of white, red, yellow, and blue, and beneath them runs the following inscription, painted on a blue ground :—

This Church was built in Memory of the Officers whose names are written above, and of the Non Commissioned Officers and Private Soldiers, too many to be so recorded, who fell, mindful of their duty by sickness or by the sword in the Campaigns of Sind and Afghanistan, A D 1838-1843

At the extremity of the promontory are the Old Lighthouse (1771), and an old European Cemetery. The present lighthouse (1874) is on Prongs Island, ¼ m. S of Colaba Point, with which it is connected by a ridge of rock exposed at low tides; it is 150 ft high, and the light which flashes every 10 secs is visible 18 m off at sea Another lighthouse on Khanderi Island marks the N entrance to the harbour. This island and the adjoining island of Andheri, which are about 7 m. S of the entrance, are known to mariners as Hendry

Kandry, and were occupied by pirates up to 1756.

Returning to the Wellington Fountain, the Esplanade Road along the W side of the open ground leads past a fine block of buildings, consisting of the Science Institute, the Elphinstone College, the Sassoon Institute and the Army and Navy Stores. Opposite the Stores is the equestrian statue of King Edward VII as Prince of Wales, by Sir Edgar Boehm, presented to the city by Sir A Sassoon.

The Prince of Wales Museum of Western India.—This fine building, the foundation-stone of which was laid by H M George V, then Prince of Wales, in 1905, on the occasion of his first visit to India, occupies an island site at the Southern end of Esplanade Road. The scheme consists of three units, to be arranged round three sides of a quadrangle, the central block (1914) and one wing (1937) being completed The style of the structure is based on the Indian work of the 15th and 16th centuries in the Presidency, and the materials used are the blue and yellow basalt found in the vicinity of Bombay The buildings were designed and carried out under the supervision of Mr G. Wittet, F.R I B A., Architect to the Government of Bombay

Its contents comprise Art, Archæology, and Natural History. A section devoted to Forestry has been added, and a small local Geological collection of Rocks, Minerals and Fossils is also exhibited.

Art Section.—This consists principally of the Sir Ratan Tata bequest of pictures, a splendid collection of Oriental arms, a varied and unique exhibit of jade, beautiful examples of china, Indian brass, silver, Indian and Persian draperies and *objets d'art*. Other pictures were presented by the late Sir Dorab Tata. Among Sir Ratan Tata's pictures are many most interesting examples of the Dutch, British, French, and Italian Schools, and works by such masters as Cuyp, Lawrence, Romney, Gainsborough, Troyon, Poussin and Titian. Sir Dorab Tata's gift includes representative works of the late Italian Schools and a few good modern French and British pictures. There is also a collection of Indian paintings (Mughal and Rajput) and an extremely interesting collection of relics of the Satara Rajas, both purchased from Mr P V Mavji in 1914.

Archæological Section — This contains three main divisions, the Brahmanical Section; Jain, Prehistoric, and Foreign antiquities, and the Buddhist Section In the first category are some large bas-reliefs discovered at Dharwar and attributed to the 5th or 6th century, A D ; a bust of Siva from the Elephanta Caves (p. 26), numerous other interesting sculptures of Siva, some images and bas-reliefs of Brahma, a magnificent image of Vishnu (from Elephanta), and a miscellaneous collection of articles used in Brahmanical worship. The prehistoric antiquities are mostly from Madras, and comprise paleolithic and neolithic implements; also pottery, including examples of necropolitan pottery utilised for coffins. A number of interesting bas-reliefs come from Mesopotamia and some good Jain sculptures are on permanent loan from the Bombay Branch of the Royal Asiatic Society In the Buddhist Section are portions of the Stupa of Amaravati, some terra-cotta figures of Buddhas and Bodhisattvas, fragments and images of Buddhas (Gandhara School) and very interesting bas-reliefs (of the same school) representing subjects from Buddhistic legend.

Natural History Section.—The exhibits (in the new wing) are specimens from the collections of the Bombay Natural History Society (started 1883 and still existing), formerly housed by Phipsons. These include examples of all the Indian bovines; wild sheep, wild goats, serows, goral and takin; heads of nilgai, black buck, and chinkara, and of the muntjac, bara singh, Kashmir stag, and the rare shou; and sambhar, spotted deer and swamp deer. Good heads of African animals are also shown. Among the carnivora are a fine lion, some excellent tiger skins and a record tiger skull. The Indian wolf, wild dog and other *Canidæ* are well represented, and good exhibits of the brown and sloth bears are shown. The Insectivorous Mammals and Rodentia are represented by a large series of skins and case specimens. The Birds' Section contains, besides many beautiful specimens, a collection of drawings by Gronwold. The Reptiles illustrate the various poisonous snakes, including king cobras, and resemblances between certain poisonous and non-poisonous species. Fishes and insects form an interesting feature of this section.

Forest Section.—This includes specimens of timbers grown in the Bombay Presidency.

The Royal Institute of Science.—This important group of buildings owes its inception to Lord Sydenham when Governor of Bombay (1907-13), who laid the foundation-stone in 1911, and to the generosity of Sir Jacob Sassoon, Sir Cowasji Jehangir, Sir Currimbhoy Ebrahim, and Sir Vasanji Tricumji Mulji, who furnished contributions for the erection of the various units. The scheme consists of a College of Science occupying a three-storey block fronting Mayo Road, a science library, a public hall at the corner of Mayo Road and Esplanade Road, and a block of examination schools facing Esplanade Road. The building, which is Renaissance in character, is constructed of yellow basalt stone, obtained from quarries in the vicinity of Bombay. The Architect was Mr G. Wittet. Opposite the Institute stands a statue of the Duke of Windsor as Prince of Wales, by Mr Leonard Jennings, erected in 1927 to commemorate his visit in 1921.

The Elphinstone College, removed from Byculla in 1890 (p. 20), occupies a large building in the Romanesque Transition style. The main hall is called after Sir Cowasjee Jehangir Readymoney, in recognition of his large contribution for the purpose of building the original institution. The Elphinstone Institution was founded as a memorial to the Hon. Mountstuart Elphinstone, the Governor of Bombay. In 1856 it was divided into a High School (see p. 17), and this College for the higher education of Indians. Sir Alexander Grant, Bart., was Principal of the College in 1862, and distinguished scholars, such as Sir Ramkrishna Bhandarkar, the great Orientalist, have filled Professorships. In the library is a fine portrait of Elphinstone by Sir T. Lawrence.

The **State Record Office** occupies most of both wings. Amongst the records are preserved the oldest documents relating to the E.I. Company (the letter-books of the Surat Factory go back as far as 1630), and many other priceless historical papers, including the letter of the Duke of Wellington announcing the victory at Assaye.

The Mechanics' or Sassoon Institute was founded originally in 1847, but refounded and renamed

by David Sassoon and his son Sir Albert in 1870, and cost £15,000. Lectures are delivered and prize medals awarded. In the entrance hall is a statue of Mr David Sassoon, by Woolner. There is also a good library.

From here Esplanade Road leads across Church Gate Street to Hornby Road. On the W side of the entrance to Hornby Road are the Oriental and other buildings, while a little back in Outram Road is the Cathedral High School for boys On the right is the Jamsetjee Jeejeebhoy Institute, founded in 1849 by Sir Jamsetjee Jeejeebhoy, who, with Lady Avabai, his wife, set apart for the purpose 3 lakhs of rupees and 25 shares in the Bank of Bengal, to which the Parsi Panchayat added 35 shares more. The Government of India are the trustees The income is divided into 400 shares, of which 180 go for the Boys' and Girls' Schools in Bombay, 70 for those in Surat, and 150 for charities for the poor Farther N. are the Terminus and Offices of the G.I.P. Railway (E.) and the Municipal Offices on the W. Between them, on a circular garden plot, is a statue, by Brock, of the late Sir Dinshaw Petit, first Baronet

The remodelled **Victoria Terminus** in Hornby Road contains a Railway Information Bureau. It was opened on 27th March 1929, by the Governor, Sir Frederick Sykes; and contains, as well as refreshment-rooms, bed- and dressing-rooms and bath-rooms The former station, which adjoins, is now reserved for suburban traffic. The offices were completed in 1888, in an imposing building, with a large central dome.

S. is the **General Post-Office**, which occupies the block in Frere Road between Fort Street and St George's Road. It was erected under the supervision of Mr G. Wittet, and was designed by Mr J. Begg in the Bijapur style of architecture (p 561). E. of the railway station is **St George's General Hospital** for Europeans

The **Municipal Buildings** were designed by Mr F W Stevens, and were opened in 1893. The Oriental feeling introduced into the Gothic architecture has a pleasing effect. The tower, 255 ft high, and surmounted by a masonry dome, can be seen from all parts of Bombay The central gable terminates in a statue 13 ft high, representing "Urbs prima in Indis." The grand staircase is also crowned by an imposing dome. Immediately in front of the building is a statue by Derwent Wood of the late Sir Pherozeshah Mehta, who took a prominent part in the civic life of Bombay and in Indian politics.

From opposite these buildings Waudby Road leads S.W. to the Queen's Statue, passing the Gaiety and Novelty Theatres, the United Free Church of Scotland, the Masonic Hall, and the Alexandra School for Girls, founded by Mr Maneckjee Cursetjee, to the E. of it, and the open space of the Maidan or General Parade Ground and the Bombay Gymkhana Club on the W. At the corner of the Maidan, opposite the Municipal Buildings, is a statue of the late Mr Jamshedji Tata, flanked by allegorical figures

From the Victoria Railway Station, Hornby Road continues N. up to the Crawford Market and the main Indian residential quarters, passing on the left the *Times of India* Office, the Anjuman-i-Islam (Islamia) School, and the School of Art, while from the station to the N.W. runs Cruikshank Road in front of the Municipal Offices, and past the Police Courts, the Allbless and Cama Hospitals, St Xavier's

College, and the Elphinstone High School. On Carnac Road, which joins these two roads and forms the third side of a triangle with them, are the St Xavier's High School and the Gokaldas Tejpal General Hospital. Paltan Road, which runs behind the Crawford Market and is so called from the former Barracks, forms the commencement of Mahomed Ali Road, which crosses Carnac Road and penetrates through the densely-populated Indian city in a slight curve until it joins Parel Road at its junction with Sandhurst Road. Under the name of Kingsway, Parel Road continues past the King's Circle as far as Sion (11 m.)

The Anjuman i Islam School in Hornby Road was erected by the co-operation of Government, which gave the site and a money grant. The building was opened by Lord Harris in 1893, and the erection of it marks an epoch in the history of the Muslim community. The building, which has a tower 125 ft. high, was designed by Mr James Willcocks.

The Sir Jamsetjee Jeejeebhoy School of Art, called after a distinguished Parsi baronet, was first opened for pupils in 1857. In 1877 the present building was erected. Excellent drawings and designs are made here, as well as work in silver and copper, and decorative carving in wood and stone. The buildings in Western India owe their mural paintings to students of this institution. The latest additions to it are the Sir George Clarke Studios and Technical Laboratories. The School has become particularly distinguished in recent years. Mr Rudyard Kipling was born in Bombay, while his father, Mr J. Lockwood Kipling, was Principal of the School.

The Gokaldas Tejpal Hospital (in Carnac Road), for Indians, can contain 200 patients. It owes its origin to gifts made by Mr Gokaldas Tejpal, and by Mr Rustomjee Jamsetjee Jeejeebhoy.

St Xavier's College in Cruikshank Road, and **St Xavier's High School** in Carnac Road, founded in 1867, are now separate institutions, both under the Jesuit fathers. The College, which is affiliated to the University, and has 800 students, includes a highly-equipped science department. The High School is a massive building, with a high octagonal tower.

Opposite the High School is the **Court of Small Causes**. Near by, was formerly the Robert Money School, founded in 1838, but now removed to Girgaon and under the management of the C.M.S.

The Elphinstone High School, at the junction of Carnac and Cruikshank Roads, is the Government public school of Bombay, and retained possession of the original buildings on this site when the *College Department* was separated to form the Elphinstone College. In front of it is a fine flight of steps.

The object of this school is to teach up to the standard of the University entrance examination, at fees within the reach of the middle-class people of Bombay and the districts. It has classes for the study of English, Marathi, Gujarati, Sanskrit, Latin, and Persian, and contains 28 class-rooms, a large hall on the first floor, and a library. There are instructors in drill and cricket. The building, which is 452 ft.

long, was designed by Mr G. T. Molecey. Sir A. Sassoon contributed 1½ lakhs of rupees towards it.

The **Pestonji Kama Hospital**, for *Women* and *Children*, in Cruikshank Road, is a Gothic building. It owes its existence to gifts by Mr Pestonjee Hormusjee Kama, as the **Allbless Obstetric Hospital** beyond it does to the munificence of Mr Bomanjee Eduljee Allbless. Both are under the Dufferin Fund and the sole management of lady doctors Farther E, and adjoining the Municipal Offices, are the Esplanade Police Courts, erected in 1884-88

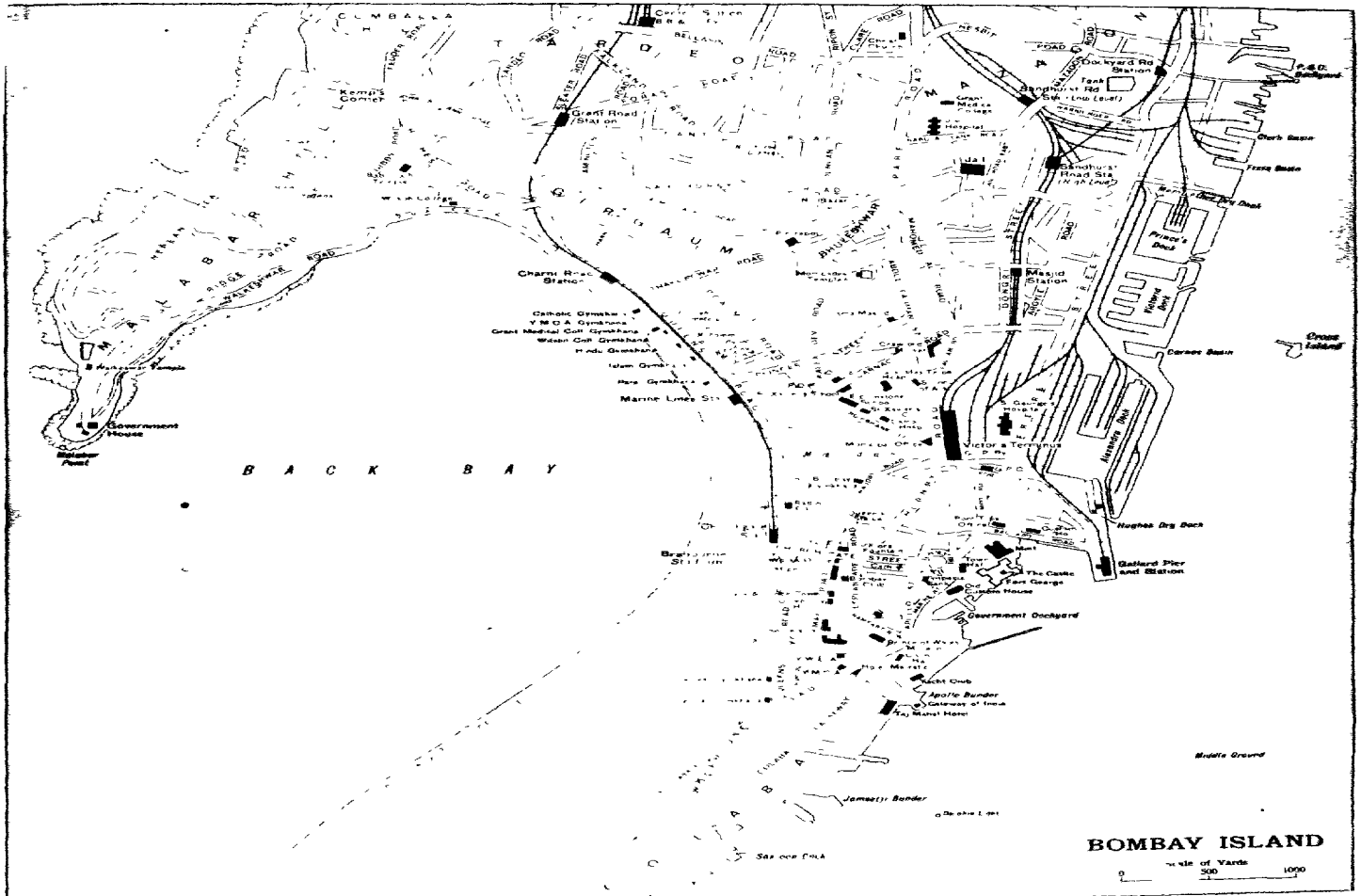
The **Crawford Market**, which is situated at the junction of Hornby Road and Carnac Road, was founded by Mr Arthur Crawford, C.S., Municipal Commissioner from 1865 to 1871 It consists of a Central Hall, in which is a drinking fountain, given by Sir Cowasjee Jehangir Readymoney, surmounted by a Clock Tower, 128 ft. high To the right is a wing, 150 ft. by 100 ft., in which are fruit and flowers, and on the left is another wing, 350 ft by 100 ft., for vegetables, etc, etc The whole is covered with a double iron roof. Over the entrance gate are bas-reliefs executed by Mr J. Lockwood Kipling, by whom the fountain was also designed. The ground is paved with flagstones from Caithness There are many kinds of plantains or bananas; the finest are short, thick, and yellow. The best oranges are those from Nagpur, and the best grapes are from Aurangabad. The mangoes arrive in May; the bulk of them come from orchards in the Konkan and from Goa.[1]

[1] It was the failure of supplies of Mazagon mangoes which specially annoyed the Wazir Fazl-ud-din in *Lala Rookh*. But the Mazagon mango is now rarely seen.

The Pummelow, the *Citrus decumana*, is particularly fine in Bombay. The *Fish Market* is at the end of the *Mutton Market*. The turtles come from Karachi, in Sind. The oysters are of moderate size and well flavoured. The *Palla* fish, generally about 2 ft. long, the salmon of India, is excellent, but has many troublesome bones The best fish of all is the pomfiet, or pomfret, a flat fish The *Bombil*, called by the English *Bommelo* and *Bombay Duck*, is a glutinous fish, used with curry when salted and dried. On the S. side is the *Poultry Market*, where game also may be purchased.

Starting a little N W of the market, and extending to near the Marine Lines Station, is Princess Street, named after, and in 1905 opened by Her Majesty Queen Mary (then Princess of Wales). This was the first arterial thoroughfare opened by the City Improvement Trust. Another main one, Sandhurst Road, runs from the head of the Back Bay to Dongri Street, and through Naoroji Hill to the Docks. Another Trust road, Lamington Road, runs from Queen's Road to Jacob's Circle, past the **Byculla Club** The main entrance of the **Central Station** of the B.B and C I Railway is in Lamington Road

N.E. and E. of the market and between the main Indian quarter and the sea are the principal commercial **Docks** of Bombay. The **Victoria Dock** (1885-1888) covers 25 acres, and has an entrance 80 ft. in width. **Prince's Dock**, lying N. of this and connected with it, was commenced during the Prince of Wales's visit in 1875-76 and completed 1879. Remains of a submerged forest were found at a depth of about 10 ft. The dock extends over 30 acres, and is capable of containing twenty ocean steamers It has a tidal observatory.


BACK BAY
Grant Road Station
Charni Road Station
Mazgaon
Malabar Hill
Government House
Marine Lines Stn
Victoria Terminus
Sandhurst Road Stn
Mandvi Station
Princess Dock
Hughes Dry Dock
Gallard Pier and Station
Government Dockyard
Apollo Bunder
Gateway of India
Taj Mahal Hotel
Middle Ground
BOMBAY ISLAND
Scale of Yards
0
500
1000

N.W. is the **Merewether Dry Dock** (1891), and a street of warehouses and offices, round which the Harbour Mission works. South of the Victoria Dock is the **Alexandra Dock**, of which the foundation-stone was laid by King George V. (then Prince of Wales) on 13th November 1905. It extends S. of the Ballard Pier, and encloses an area of 49.52 acres. The depth of water in it is 37 ft., and the Hughes Dry Dock is 1000 ft. long, and has an entrance 100 ft. wide. The Dock was opened on the 21st of March 1914 by Lord Hardinge of Penshurst. These developments were carried out under the Trust Engineer, the late Mr P. Glynn Messent, C.I.E.

All these docks were excavated on the estate known as the **Elphinstone** and **Mody Bay Reclamations**, which have taken in from the sea 483 acres, and have raised and improved 157 acres, transforming the Eastern foreshore of the island from a mud swamp. A greater reclamation lies between Mazagon and Sewri, containing a grain depot as well as depots for coal, and the Cotton Green was moved from Colaba to Sewri in 1925.

The Trustees' Docks are connected with the two main line railw ayswhich feed Bombay, and by the Port Trust Railway, the point of junction being at Wadala, about 6 m. north of the Alexandra Dock.

The **Port Trust** is composed of twenty-one members under an official Chairman All the business interests and the railways are represented. In 1935-36 its receipts amounted to 243 lakhs and its expenditure to 240 lakhs. During the half-century to 1937 the value of the trade of the port increased from 16 crores of rupees till it reached the figure of 202 crores in 1913-14, but, owing to the war, it declined to 140¼ crores in 1915-16; the figure for the year 1923-24 was 275.6 crores, and for 1929-30, 211 crores. The number of steamers entering and clearing the port was 5090 in 1935-36, the great majority being ships under the English flag. The principal articles of trade are: Imports — cotton, piece-goods, metals, machinery, silk manufactures, railway plant, kerosene oil, sugar, and timber; and Exports—coal, cotton, grain, oil, seeds, tea, hides, raw wool, piece-goods, twist, yarns, and manganese ore. The value of the Foreign trade (excluding Government stores) in 1935-36 was: Imports 54 crores, Exports 33 crores; while the value of the Coasting trade was 42 crores. During the year 1929-1930 the total of imports and exports was 211 crores. There has been much variation in the volume of exports of raw cotton, but 2 million bales were exported in 1935-36.

The **Dockyards** (1845) **of the P. & O. Company** and **B.I.S.N. Company** are worked by the Magazon Docks Company in the suburb of Magazon. The Ritchie Dry Dock is 495 ft. long, and capable of receiving vessels of deep draught. Close by is the Electrical Power Station at Parel (p. 24), which lights the city and runs the tramway service.

The visitor can plunge at once into the Indian city by stepping across Carnac Road at the Crawford Market and entering Abdul Rahman Street (which is a prolongation of Hornby Road). It is in the Muslim quarter, along the Parel Road as far as Byculla. The Parsis are to be found chiefly in Dhobitalao, the district between Kalbadevi Road and Queen's Road.

In the **City** proper the streets and bazars are narrow and tortuous. Some of the houses are in the wooden architectural style of Gujarat. Their fronts are covered with carving, and some have projecting storeys supported upon elaborately sculptured corbels. Here and there are mosques and Hindu temples gaudily painted. The streets teem with life.

Sir Edwin Arnold wrote of them: "A tide of Asiatic humanity ebbs and flows up and down the Bhendi bazar, and through the chief mercantile thoroughfares. Nowhere could be seen a play of livelier hues, a busier and brighter city life. Besides the endless crowds of Hindu, Gujarati, and Mahratta people coming and going between rows of grotesquely-painted houses and temples, there are to be studied here specimens of every race and nation of the East."

It is said that the triangle formed by Kalbadevi Road, Shaikh Memon Street and Carnac Road contains an epitome of the Indian peninsula and a great portion of its wealth

There are nearly 3000 jewellers of the different Indian nationalities in Bombay, who find constant and lucrative employment. One of the most active industries is the manufacture of brass and copper pots and other utensils. The black wood-carving is famous, as is the sandal-wood and other carving; the term "Bombay Boxes" includes sandal-wood carving as well as inlay work. Tortoise-shell carving is a speciality, also lacquered turnery. Gold and silver thread is manufactured and used for lace, and Bombay embroidery is much prized.

In Bellasis Road, Byculla, the **Byculla Club**, a residential Club with extensive grounds founded in 1833, was closed in 1846. The **Arab Stables** have moved to the Mahalakshmi Race-course. Bellasis Road leads to the Central Railway Station (B.B. and E.I. Ry.)

The **Nal Bazar**, in Sandhurst Road, in the N.W. quarter of the city, supplies a large part of Bombay, and is generally immensely crowded.

A little S. of the Nal Bazar is the **Pinjrapol**, or Infirmary for Sick and Aged Animals, a curious institution, covering several acres, and maintained here, as elsewhere in India, by the Jain community. This is in the quarter called **Bhuleshwar**, "Lord of the Pure-minded", and the temple of the deity a form of Siva, is within the enclosure. To the S.W. is the **Roman Catholic Church** of **Nossa Senhora da Esperanza**:[1] and to the S.E. is the **Mombadevi Tank** and Temple, from which the name of Bombay is believed to be derived.[2] The **Copper Bazar** is opposite the Tank. S. of the Tank in Princess Street is the Jami Masjid, and E. of this is Abdur Rahman Street, continued N. by Parel Road.

Near the cross-roads with Grant Road from the W. is the **Jamsetjee Jeejeebhoy Hospital**, erected in 1845 at the joint expense of that gentleman and the E.I. Company. In the hall is a bronze statue of Sir Jamsetjee Jeejeebhoy, a copy of one in the Town Hall Attached to it are a

[1] The original church, which was built in 1596, stood on the Esplanade and was demolished in 1760, when the present church was built in Kalbadevi at the expense of the Government.

[2] Momba (Mumba) itself is a corruption of Maha Amma (Amba), Great Mother, a goddess of the Kolis, and probably the tutelary deity of Bombay. The temple and tank originally stood on part of the site of th Victoria Terminus, and were demolished in 1737, when the fortifications of the old town were enlarged. The present temple and tank are said to date from 1753.

Hospital for Incurables, the Bai Motlabai Wadia Obstetric Hospital, and the Dinshaw Maneckjee Petit Hospital for women and children, erected in 1889 and 1890.

Adjoining the Hospital is the **Grant Medical College**, established in 1845 in memory of Sir Robert Grant, Governor of Bombay (1835-38). Besides the Principal and nine professors, there are twelve demonstrators and tutors in the College. The Museum is full of curious things. The grounds cover 2 acres, and are made instructive by planting in them all kinds of useful trees and shrubs.

The Northbrook Gardens, in Grant Road, close by, were laid out in 1874.

A little to the S.E of the J. J. Hospital are the Jail (now a remand home for boys) and a European Workhouse. N. from the Hospital, Parel Road leads past Christ Church and the Byculla Station to the old Victoria Technical Institute and the Victoria and Albert Museum, and finally to the old Government House at Parel. The old **Institute** occupied the building vacated in 1890 by the Elphinstone College, opposite the Victoria Gardens, which was built from a gift by Sir Cowasjee Jehangir Readymoney, it has been transferred to a new building near Matunga. It is under a Principal, assisted by eight professors, and is intended to provide a training in Art and Science in their application to industrial and other purposes.

The Victoria and Albert Museum stands in the Victoria Gardens. Until 1857 the collection (1848), including prints, maps, photographs, etc., illustrating the history of Bombay, and to be seen in the "Old Bombay" rooms, was kept in the Fort Barracks, but, on Sir G. Birdwood being appointed Curator by Lord Elphinstone, he raised a subscription for building this Museum. Sir B. Frere laid the first stone in 1862, and Government completed the building in 1871. The Clock Tower in front of it was erected by Sir Albert Sassoon, who also presented the statue of the Prince Consort, by Noble. The **Victoria Gardens** have an area of 34 acres. To the right of the S. entrance to them is the stone elephant which gave the island of Elephanta its name; and on the E. side of them are Zoological Gardens. A band plays here twice a week

Parel Road continues from here past the Veterinary College, built on a site given by Sir Dinshaw Maneckjee Petit, to the **Old Government House**. The building occupies the site of the Hindu temple of Parali Vaijnath, from which the locality takes its name. In 1673 the Jesuits had a church and convent here; the latter was taken over in 1719 by Governor Boone, who used it as a country house. The first Governor who lived here permanently was William Hornby, between 1771 and 1780, and the right and left wings were added by Mountstuart Elphinstone (1819-1827). In 1885 Lady Fergusson, the wife of the then Governor, died here of cholera, and the place remained vacant until 1897, when it was utilised as a plague hospital. Two years later, Mr W. M. Haffkine opened a Plague Research Laboratory in the building. This became the Bombay Bacteriological Laboratory in 1906, and it has been known as the **Haffkine Institute** since 1925. Under this name it is used as a laboratory for Bacterial Research, the study of Tropical Medicine, and the preparation of plague vaccine. Visitors

are permitted occasionally to see the process of extracting venom from snakes and of making anti-venene serum. A Rabies Institute also is established here. The public rooms were in the centre facing the W. The drawing-room or ballroom, above the dining-room, occupied the place of the old Portuguese chapel. In addition to these two Institutes, a fine range of buildings has been erected in the grounds and in the immediate neighbourhood. The King Edward Memorial Hospital, the Sunder Das Medical School, the Wadia Maternity Home, and the Wadia Hospital for Children, form one of the largest and most complete medical treatment centres in the East.

There are large railway workshops at Parel; and spinning-mills as well as at Tardeo and Warli. The Receiving Station of the Tata Hydro-Electric Works is at Parel (p. 24).

The Franciscan Church of Nossa Senhora da Gloria in Parel was the headquarters of the Padroado (Portuguese) section of the R.C. community until an agreement effected with the Vatican in 1928.

The **European Cemetery**, at Sewri, E. of Parel, until 1867 a Botanical Garden, is a sheltered spot under Flagstaff Hill.

2 m. N. of Parel is the Acworth Leper Asylum, near Matunga Village. The Sassoon Reformatory is situated near the Matunga Road Station of the B.B and C.I. Railway.

The drive round the Back Bay to **Malabar Hill**, 180 ft. high, by Marine Drive and Malabar Hill Road, is extremely beautiful and interesting. Beyond the Marine Lines Station are an enclosed burning place of the Hindus, a Muslim burying-ground, and the Girgaon English and Scottish cemeteries (which are not now used). Farther on in Chowpatty (Chaupati) is the **Wilson College** (named after Rev. Dr J. Wilson, F.R.S., Oriental scholar and Scottish missionary), for the education of young men.

At about 3 m. from the Fort the road begins to ascend a spur of Malabar Hill. Near the top, on the left, are the entrance gates to the drive through the grounds (private) of **Government House at Malabar Point**, with a pleasant view across Back Bay to the city of Bombay on the E. side. Below, at the extreme point, there used to be a battery. Not far off to the N. a large ship, the *Diamond*, was wrecked, and eighty passengers were drowned. Sir Evan Nepean (1812-19) was the first Governor to reside at Malabar Point. In 1819-20 Mr Elphinstone added a public breakfast-room and a detached sleeping bungalow on a small scale. In 1828 Sir John Malcolm gave up the Government House in the Fort and considerably enlarged the residence at Malabar Point. Since 1885, when Parel was abandoned, it has been the official headquarters of the Governor.

Close by is the picturesque temple of **Walkeswar**, the "Sand Lord," built c. 1000 A.D. Throngs of Hindus will be met coming from it, their foreheads newly coloured with the sectarial mark. Rama, on his way from Ajodhya (Oudh) to Lanka (p. lviii) to recover his bride Sita, carried off by Ravana, halted here for the night. Lakshman provided his brother Rama with a Lingam from Benares every night. This night he failed to arrive in time, and Rama made for himself a Lingam of the sand at the spot. On the arrival of the Portuguese in after ages, this sprang into the sea from horror of the barbarians.

There is a small but very picturesque tank here, adorned with flights of steps, surrounded by Brahmans' houses and shrines. When Rama thirsted here, he shot an arrow into the earth, and forthwith appeared the *Vanatirtha*, "Arrow-Tank."

In the centre of the Hill, about 180 ft. above the sea, are the grounds of the Ladies' Gymkhana, and beyond them the **Hanging Gardens**, affording lovely views of the Back Bay and of the great line of grand buildings rising on the farther side of it, and of the harbour and islands and mountains beyond them.

The drive continues (p. 24) along the seashore by the Hornby Vellard [1] to Warli, and through the beautiful Mahim woods of coconut and other palm-trees.

The **Parsi Dharmsala**, in the Gamdevi Road, intended for poor Persian Parsis, is passed on the approach to the Towers of Silence from the S. A similar dharmsala close by was erected by Sir Cowasjee Jehangir Readymoney, in memory of his grandfather in 1812.

The **Babulnath Temple**, on the S.E. part of Malabar Hill, is near the steps leading to the Towers of Silence. It is not an ancient building: the spire and pillared hall and terrace were completed in 1900: but it is a prominent landmark and figures in all views of "Bombay from Malabar Hill."

Between the gardens is All Saints' Church, and beyond them and N. of the head of the curve of the bay are the **Five Parsi Towers of Silence.** In order to see them, permission must be obtained from the Secretary to the Parsi Panchayat, 209 Hornby Road. Strict compliance with the regulations is required. Sir Jamsetjee Jeejeebhoy, at his own expense, made the road which leads to the Towers on the N. side, and gave 100,000 sq. yds. of land on the N. and E. sides of the Towers. Within the gateway of an outer enclosure a flight of eighty steps mounts up to a gateway in an inner wall. From this point the visitor is accompanied by an official of the Panchayat, and turning to the right comes to a stone building, where, during funerals, prayer is offered. At a Parsi funeral the bier is carried up the steps by four Nasr Salars, or "Carriers of the Dead," and followed by two bearded men and a large number of Parsi mourners in white robes walking two and two in procession. The bearded men, who come next the bier, are the only persons who enter the tower. No other persons are permitted to do so on any account. On leaving the tower, after depositing the corpse on the grating within, the carriers proceed to the purifying place, where they wash and leave the clothes they have worn in a tower built for that express purpose. The general mourners have their clothes linked, in which there is a mystic meaning. There is a model of one of the Towers which was exhibited to the Prince of Wales (the late King George V.) in 1905, and is produced to visitors [1] The five towers are cylindrical in shape, and whitewashed. The largest is 276 ft. round and 25 ft. high. At 8 ft. from the ground is an aperture in the encircling wall about 5½ ft. square, to which the carriers of the dead ascend

[1] The Hornby Vellard (Portuguese *Vallado*, fence) or Warli Causeway was constructed early in the 18th century between Mahalakshmi and Warli to shut out the sea, which at high tide made the central portion of the island a swamp.

[1] The first Tower of Silence in Bombay was erected in 1674 in the time of Aungier.

by a flight of steps. Inside the plan of the building resembles a circular gridiron, gradually depressed towards the centre, in which is a well 5 ft. in diameter. Besides the circular wall which encloses this well there are two other circular walls between it and the outside, with footpaths running upon them, the spaces between them are divided into compartments by radiating walls The bodies of adult males are laid in the outer series of compartments thus formed, the women in the middle series, and the children in that nearest the well In half an hour the flesh is completely devoured by the vultures The skeleton is left to bleach in sun and wind. Then the carriers of the dead, gloved and with tongs, remove the bones from the grooves and cast them into the well. Here they crumble into dust, which accumulates so slowly that in forty years it rose only 5 ft This method of interment originates from the veneration the Parsis pay to the elements Fire is too highly regarded by them to allow it to be polluted by burning the dead. Water is almost equally respected, and so is earth, hence this singular mode of interment has been devised There is, however, another reason. Zartasht (Zoroaster) taught that rich and poor must meet in death. The surroundings of the Towers are arranged to foster calm meditation Under the shade of fine trees, relatives of the deceased can sit and meditate, and the view to the W and S over the waters, and to the E and N over the harbour and the distant mountains beyond, is enchanting. Even the cypresses, as the Parsis themselves say, tapering upwards, point the way to heaven At the S E foot of the hill is an **Almshouse** for decayed Parsis of both sexes, erected by the sons of the late Fardonjee Sorabjee Parekh

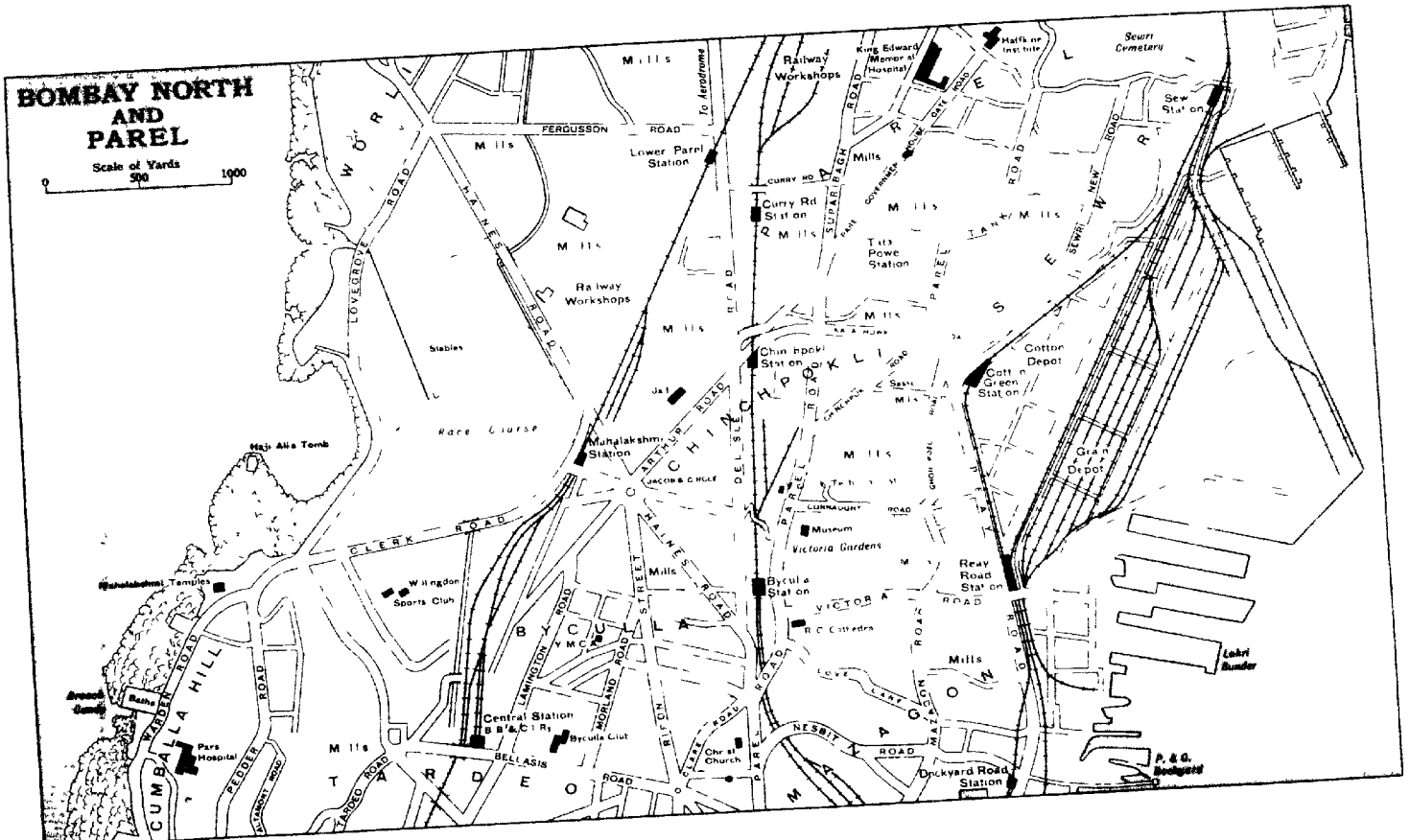
The drive from **Malabar Point**, and thence along the Nepean Sea Road by **Breach Candy**,[1] under the W. side of Cumballa (Khambala) Hill, is one of the most beautiful in the island, especially at evening. On these hills are situated the principal residences of the European community and many wealthy Indians, surrounded by small but bright gardens

On Cumballa Hill is the Bomanji Dinshaw Petit Hospital for Parsis At the N end of Breach Candy are the Mahalakshmi Temples, oldest in Bombay, on the sea

Along Clerk Road is the **Race-course** where races are held, in cold weather on Wednesdays and Saturdays, under the management of the Western India Turf Club It has been considerably enlarged, and a new Park has been opened close by Here also is situated the **Willingdon Sports Club**, founded by Lord Willingdon (Governor of Bombay, 1913-18) as a meeting place for Indians and Europeans, with its Golf Course, Polo ground and Tennis courts

The Tata Hydro-Electric Works.—Bombay is supplied with electric power and current from the Receiving Station of the Tata Hydro-Electric Works, which is at Parel. This scheme, which was inaugurated by Sir Dorab Tata, impounds the monsoon rainfall (often 500 in.) on the Ghats at Lonavla (p. 513), in three lakes formed at Shirawta, Walwan and Lonavla, with intercommunicating duct lines, forebay, etc The dams of

[1] Various derivations and meanings of this name have been put forward. Mr Edwardes (*Bombay City Gazetteer*, 1910) suggests it means "the beach at the mouth of the hollow or pass—that is to say, the hollow between Cumballa ridge on the north and the Malabar ridge on the south" Candy = khind or pass.


BOMBAY NORTH AND PAREL
Scale of Yards
0
500
1000
WORLI
LOVEGROVE ROAD
HANES ROAD
FERGUSSON ROAD
To Aerodrome
Mills
Lower Parel Station
Railway Workshops
Stables
Race Course
Haji Alis Tomb
Muhalakshmi Station
ARTHUR ROAD
JACOB CIRCLE
DELISLE ROAD
CHINCHPOKLI
Jail
CLERK ROAD
Willingdon Sports Club
Mahalakshmi Temples
WADIA HILL
CUMBALLA HILL
Breach Candy Baths
Pars Hospital
PEDDER ROAD
ALTAMONT ROAD
TARDEO ROAD
Central Station B.B.&C.I.Rly.
LAMINGTON ROAD
MORLAND ROAD
Byculla Club
BELLASIS ROAD
BYCULLA
Y.M.C.A.
RICHARDSON STREET
HANES ROAD
Christ Church
TARDEO
Curry Rd Station
CURRY RD
SUPARIBAGH
Tata Power Station
PAREL
TANK/MILLS
SEWRI NEW ROAD
Chinchpokli Station
Cotton Depot
Cotton Green Station
Grain Depot
CUNNAUGHT ROAD
Museum
Victoria Gardens
Byculla Station
R.C.Cathedral
VICTORIA ROAD
Reay Road Station
Mills
LOVE LANE
MAZAGON
NESBIT ROAD
Dockyard Road Station
P. & O. Boatyard
Lahri Bunder
Sewri Cemetery
Sewri Station
King Edward Memorial Hospital
Haffkine Institute
SEWRI

these three lakes are approximately 90, 70, and 34 ft in height, with areas of 3000, 1700, and 720 acres respectively, all at 2000 ft. above sea-level. The foundation-stone of the first dam, which impounds the Lonavla Lake, was laid by Sir George Clarke (Lord Sydenham) on the 8th February 1911. The ducts lead the water to a forebay near the Duke's Nose, where it enters the Pipe Line, to take a plunge of 1740 ft. down to the Generating Station at Khopoli. The power generated is conveyed 42 m. to the Parel mission cables, crossing several navigable creeks on lofty steel towers. The works (1915) have been enlarged by extensions on the Andhra River and elsewhere. A Railway Power Station (1922) obtains energy from the Nila Mula River.

SUBURBAN RAILWAY STATIONS.

The two principal ry. stations in Bombay are the **Victoria Terminus** (Great Indian Peninsula Ry.) and the **Central Station** (Bombay Baroda and Central India Ry.) of which mention has already been made (p. 7). The local stations on the former line are Masjid, Sandhurst Road, Byculla, Chinchpokli, Currey Road, Parel, Dadar, Matunga, Sion and Kurla (10 m., Route 2). Those on the latter are Church Gate, Marine Lines, Charni Road, Grant Road, Mahalakshmi, Lower Parel, Elphinstone Road, Dadar, Matunga Road, and Mahim (10 m., Route 10). The Harbour Branch (1925) runs from the Victoria Terminus (stns., Masjid, Sandhurst Road, Dockyard Road, Reay Road, Cotton Green, Sewri, Gowari) to Kurla, 10 m., where it connects with the G.I.P. main line. The three lines are electrified, and also the main lines to Poona and Igatpuri (p. 34).

MISSIONS.

The S.P.G., with a Church in Kamatipura Road, has four missionary clergy, and a branch of the Ladies' Association working in the zenanas.

The **C.M.S.** (established in Bombay since 1820) has a *Church* in Dhanji Street, and large *Schools* for boys and girls at Girgaon.

The **Mission Priests of St John the Evangelist** (Cowley Fathers) serve the Church of St Peter's, Mazagon, and have a Mission House and Schools for boys and girls, also an Indian Mission and Orphanage in Babula Tank Road.

The **"All Saints" Sisters** (from Margaret Street, London) have been working in Bombay since 1878, and nurse in the Jamsetjee Jeejeebhoy and St George's Hospitals. They have an orphanage for small boys and girls in Mazagon.

The *American Presbyterian Board of Foreign Missions* or *Mahratta Mission, Byculla*, has a considerable staff. The *United Free Church of Scotland* has a strong body of missionaries connected with the Wilson Mission College (p. 22), affiliated to the University.

The **Roman Catholic Church** is represented by the Jesuit Fathers as well as secular clergy, under an archbishop, who have 18 churches and 12 chapels in the island, large schools and a college for boys (p. 17) as well as several convent schools and charitable institution for girls.

ROUND THE ISLAND OF SALSETTE[1]

The beach at Juhu (10 m. from the city) provides splendid bath-

[1] (Sashasti) Map faces p. 34.

ing, and even nearer is Palli Hill, a favourite residential suburb, with a nine-hole golf course Further afield the monsoon jungles of the Lake District of Vehar and Pawai attract the naturalist, the Caves of Kanheri Jogeswar, and Borivli (pp 30-31) draw pilgrims, and the old-world charm of the early Portuguese church of Bhayndar and the parochial village life of the "island" of Dharavi (road *vid* Bhayndar) reveal an unsuspected element in modern Indian life

A good motor road encircles the whole island of Salsette (distance about 50 m) Bombay is left by way of Parel Road and its continuation, Kingsway. This leads *vid* Causeway Sion (1805) to Thana, between which place and Ghorbunder (D B), the Ulhas River breaks through the magnificent gorge of Gaimukh (the Cow's Mouth), the road closely following it. Bombay is re-entered by Bandra and the Mahim Causeway. The trip, about 75 m in all from the Apollo Bunder, can be done comfortably in a day, but lunch should be carried A shorter round trip through the Lake District (distance about 45 m) takes a road which skirts Lake Pawai

EXCURSIONS IN THE VICINITY OF BOMBAY

I In the Harbour and by Sea

1 Elephanta
Chaul
3 Down the Coast

II By the B.B and C I. Railway

1 Bandra
2. Jogeswar Caves, Vesava and Aldeamar.
3. Kanheri Caves
4. Montpezir Caves
5. Bhayndar
6 Bassein

III. By the G.I P. Railway.

1 The Vehar Lake
2. Mumbra.
3 Tansa Lake
4 The Thal and Bhor Ghats
5 Matheran.
6. Karli Cave.
7 Poona.
8. Mahabaleshwar and Panchgani

I. In the Harbour and by Sea

(1) **Elephanta** is a small island about 6 m from the Fort of Bombay Cook's launch[1] runs twice daily, and a coasting launch runs daily from Carnac Bunder. They make the passage in about 1 or 1½ hrs A bunder-boat may be hired but the length of the passage will depend on wind and tide A cheap and convenient way of making the trip is to go by the Harbour Ferry from Carnac Bunder It usually starts at 7 30 and is back by 12.15 the same morning, giving ample time to see the caves, which are reached by a walk of 1 m from the old landing-place in the S W of the island The boat will pass close to Butcher's Island, which is 3 m. nearly due E from Mazagon Dock. The island is occupied by Royal Engineer Staff, and the principal wireless installation is placed upon it The view in this part of the harbour is fine To the N is the hill known as the Neat's Tongue, on Trombay Island, which is 1000 ft. above sea-level. The highest point of Elephanta is 568 ft To the S is the hill above Karanja, called Dronagiri—a mass of rock thrown down by Hanuman on his flight to Ceylon

Elephanta is called by Indians *Gharapuri* ("the town of the rock," or "of purification," according to Dr Wilson), or *Garapuri* ("the town of excavations," according to Dr J Stevenson) The caves are called *Lenen* (Lena), a word used throughout India and Ceylon for these excavations. The island consists of two long hills, with

[1] Messrs T. Cook & Son's office is in Hornby Road

a narrow valley between them. About 250 yards to the right of the old landing-place, at the S end of the island on the rise of one of the hills, and not far from the ruins of an ancient city, was a mass of rock, cut into the shape of an elephant, from which the place derives its European name. In September 1814 its head and neck dropped off, and in 1864 the remainder was removed to the Victoria Gardens, where it was re-erected in 1912

The modern landing-place, N W of the island, consists of a rather slippery pier of separated concrete blocks The caves are distant about ½ m., and about 250 ft above the sea, and are approached by easy steps, constructed in 1853 by an Indian merchant There is a custodian's bungalow at the entrance, where a fee is paid The rules should be studied The date of the excavation of the Seven Caves [1] is now placed about the middle of the eighth century

The Great Cave faces the N., and is open also E. and W. (cruciform). The steps have lions on each side. The main hall had two wide colonnades of six columns and two centre colonnades of four columns, the recesses on the N and S sides consisting of two aisles separated by two columns, the outer aisle being much shorter than the inner, the length of the central hall from the pillars at each end is 130 ft, and the breadth from the wall of the south recess to the pillars on the outer side of the north recess is just the same Of the twenty-six columns eight have fallen by seepage of water The columns present variety of shape and ornament, they have a square shaft rising about halfway up to a fluted neck, and a capital of the shape of a squeezed cushion, bound in the middle; the height of the columns varies from 15 ft to 17 ft.

The *Lingam Shrine*, at the W end of the hall, stands 4 ft above the floor of the cave. It is 19½ ft square, with four doors facing cardinal points. At the outside of each entrance are two large figures representing *dwarpals* or doorkeepers, who lean on dwarfs The Lingam, a cylindrical stone 3 ft high, the emblem of Siva, is worshipped on great occasions by crowds of devotees.

On entering the Great Cave a striking feature is the colossal *Three-headed Bust, or Trimurti*, in the S wall, facing the N entrance It is 19 ft in height, and the faces are between 4 and 5 ft long. It is the representation of Siva, who is the leading character in all the groups of the cave The front face is Siva in the character of Brahma, the creator, the E face (spectator's left) is Siva in the character of Rudra, the destroyer, and the W face (spectator's right) is considered to be Siva in the character of Vishnu, the preserver, holding a lotus flower in his hand. On either side of the recess is a pilaster each carved with a gigantic dwarpal.

The *Arddhanariswar, or androgynous Divinity*, in the first compartment to the E of the central figure (spectator's left), represents Siva It is 16 ft 9 in high The right half of the figure is intended to be that of a male, and the left that of a female, and thus represents Siva as uniting the two sexes in his one person. The bull on which two of the hands of the figure lean, known as his *vahana*, or vehicle, is called Nandi, a constant attendant on Siva. Brahma, on his lotus throne, supported by five swans, and with his four faces, is exhibited on the right of the figure On the left, Vishnu is seen riding on what is now a headless Garuda,

[1] See *Guide* by Hirananda Sastri (1934)

a fabulous creature, half man, half eagle. Above and in the background are found a number of inferior gods and sages of the Hindus, among them Indra, the Rain-god, mounted on an elephant.

In the W. (right) compartment of the *Trimurti* are two gigantic figures of *Siva* and *Parvati*, the former 16 ft high, the latter 12 ft 4 in. Siva has a high cap, on which is a crescent over each temple. From the top of it rises a cup or shell, on which is a three-headed female figure, with broken arms, representing the Ganga proper, the Jumna, and Saraswati, which three streams are supposed to unite at Prayag, or Allahabad, the sacred meeting-place of the three plaited locks, and form the Ganges. According to a Hindu legend, the Ganges flowed from the hair of Siva. The god is standing, and has four arms, of which the outer left rests on the head of a dwarf, with curly or matted hair. In the dwarf's right hand is a cobra, in his left a *chauri* (fly-whisk), from his neck hangs a necklace, with a tortoise ornament. On Siva's right are Brahma, on his lotus seat, borne by five swans, with four hands, bearing the lotus, roll of the Vedas, and butter-dish, and Indra on his elephant.

The *Marriage of Siva and Parvati* is a sculptured group (greatly damaged) in the S. wall of the W aisle. The position of Parvati on the right of Siva shows that she is newly wed, for to stand on the right of her husband, and to eat with him, are privileges rarely permitted to a Hindu wife, save on her wedding-day. In the corner, at the right of Parvati, is Brahma, known by his three visible faces, sitting and reading, as the priest of the gods, the sacred texts suited to the marriage ceremony. Above, on Siva's left, is Vishnu. Among the attendants on the right of Parvati is one bearing a water-pot for the ceremony. This is probably Chandra, the moon-god. Behind the bashful goddess is a male figure, probably her father, Himalaya, who is pushing her forward.

Opposite this, in the N.W. (near the door), is a relief of *Kapalabhrit* or *Bhairava*, with skull and cobra on head and rosary of skulls round neck, two of his eight hands are devoted to the slaughter of a human being, and a third holds up a body for slaughter. At the W. end of the North aisle, by which the cave is entered, is a relief of *Siva performing the Tandava dance* (world-shaking), on his left is Parvati, and above a perfect Ganesh. Opposite this, at the E. end of the aisle, is a representation of *Siva* as *Lakulisa*, which so much resembles Buddha that the early describers of the cave before Erskine thought it to be that personage. The figure has the remains of two arms, which appear to have rested in his lap. It is seated on a lotus, the stalk of which is supported by two figures below. In the aisle behind the East entrance again are two reliefs on the N. and S. ends. The first of these represents *Ravana, the demon king of Lanka*, or Ceylon, attempting to remove Kailas, the heavenly hill of Siva, to his own kingdom, in order that he may have his tutelary deity always with him, for Ravana was ever a worshipper of Siva. Ravana has ten heads and twenty arms, and is with his back to the spectator. Siva is seen in Kailas, with Parvati on his right, and votaries and Rishis in the background. The legend runs that Ravana shook Kailas so much that Parvati was alarmed, whereupon Siva pressed down the hill with one of his toes on the head of Ravana, who remained immovable for 10,000 years.

The last relief opposite this shows *Siva and Parvati* seated

together, with groups of male and female inferior divinities showering down flowers from above The rock is cut into various shapes to represent the peaks of Kailas, Siva's heaven Behind Siva and Parvati is a female figure carrying a child on her hip, from which it was supposed that the sculpture represents the birth of Skanda, the war-god, the later view is that the scene represents Parvati in a temper

Beyond the main hall on the E side is the *East Wing*, consisting of an open court 55 ft wide, in the centre of which was a circular platform, probably for a Nandi On the S side of the court is a temple on a high terrace, reached by steps with lions at the top of them. The portico of the temple has a chamber at each end, that on the E end with figures of Siva, Vishnu and Brahma, and of the seven great goddesses or divine mothers (p 80) The shrine of the temple measures 14 by 16 ft, and has an altar and lingam inside it. The *West Wing* of the cave has also an open court with a large cistern on the S side, and on the W side a small open chapel with a lingam in it

Round the hill, a little to the S, are two other excavations fronting the E These are also Lingam shrines, with *dwarpals* sculptured outside, but disintegration of the rock is serious

(2) **Chaul**.—A group of ancient Portuguese and Moorish forts at the mouth of a creek just outside the harbour The steamer sails every day in the fair season (October-May), and the stopping place is called Revdanda One night out is sufficient, but better two On the south side of the creek there is a Janjira State bungalow, for which leave has to be asked from the Political Agent, but it is scantily furnished, and food, servants and bedding must be taken. It is possible to camp out in a tent, if preferred, on the summit of Korlai hill; a lovely fort, with panoramic view. On the N. side of the creek is the old Portuguese city-fort of Chaul, similar but second to Bassein, with its walls and groups of churches in ruins overgrown by a dense grove of palms Chaul was taken by the Portuguese in 1522 and made subordinate to Bassein, and was lost to the Mahrattas in 1739 On the overthrow of the Peshwa Baji Rao in 1818, it passed with the surrounding country to the British Not a trace remains of the once famous city and emporium Ralph Fitch mentions the "great trade" of Chaul in 1584, and Pyrard de Laval describes it about 1663 as differing from Bassein and Daman "in being extremely rich and abounding in valuable goods." The village of Korlai contains an old Portuguese church and a Christian population of fishermen, who retain the old Portuguese customs.

(3) **Down the Coast.**—Steamers (twin-screw and oil-driven) of the Bombay Steam Navigation Company ("Shepherd Company"), of which Messrs Killick, Nixon and Co (120 Frere Road) are the managing agents, sail from the Alexandra Dock, Ferry Wharf, for Panjim (Nova Goa) daily, carrying the mails, and calling at Ratnagiri and Vijayadrug, an old Angria stronghold, taken by Clive in 1756 (daily service also to Vijayadrug)

The longer trip to Goa can be made during the week-end (leave Bombay 10 a m Sat, arrive Panjim 7 a m Sun, depart 10 0 a m, arrive Bombay Mon 7 0 a m) There is first-class saloon accommodation for eight passengers; and a catering contractor on board supplies full messing at Rs 6 per day. (For Goa, see Route 27, p 543) A service of steamers twice weekly serves Mangalore (p 642), leaving Bombay on Tues-

days and Fridays at 1.30 p.m. and arriving at Mangalore on Thursdays and Mondays. (Return: Depart Saturday and Tuesday, 8 a m Arrive Bombay, Monday and Thursday) The steamers call *en route* at Vengurla, Mormugao, and Karwar

II. By the B B. and C I. Railway or Car

(1) **Bandra** station (7 m from Bombay (Central) opposite Mahim) is a favourite residence for persons who have daily business in Bombay Portuguese traditions are still strong, though none of the original buildings have survived. The cathedral-like chapel of *Mount Mary* has been rebuilt **Juhu** (bathing), with a wide stretch of beach, lies to the left of Villa Parle (Palli Hill), 3 m. from Bandra.

From Andheri Station, 2 m. W., is the seaside village of Vesava, used as a holiday resort for Bombay. There are only private bungalows. The aerodrome lies ½ m. W. A day's trip should include a sea bathe and a visit across the creek to Aldeamar Fort, first a Portuguese then a Mahratta stronghold

(2) **The Jogeswar Cave** lies close to Jogeshwari Station (13 m) on the B B. C I. Ry, and can be reached by car Dr Burgess attributed this Brahman cave to the second half of the 8th century A.D. Like the Elephanta Cave, it has extensive wings to the central hall, which has a shrine 24 ft square in the middle, with four doors and a large lingam. The veranda (S. side) is 120 ft. long, and has ten columns (seven replaced) of Elephanta pattern, while twenty such pillars form a square in the hall.

Electric torch-lights are in any case necessary, but snakes may shelter in this and other deserted caves

(3) **Cave Temples of Kanheri** (*Kennery*) —These caves are all excavated in the face of a single hill in the centre of the island of Salsette Train or car to **Borivli** stn., 19 m from Bombay (good clean waiting-room), thence 5 m to the caves by a rough country road, on which carts ply and which runs to within 1 m of them From Thana (Route 2) a cart or light vehicle can proceed 4 m. towards the Tulsi Lake (p. 33) and then 2 m to the caves by a narrow path, which winds along the sides of rocks This route, however, is difficult and is not recommended

There are one hundred and nine Buddhist caves, but only two or three are of interest It is possible that the greater part of them were executed by a colony of Buddhists, "who may have taken refuge here after being expelled from the continent, and who tried to reproduce the lost Karli in their insular retreat" They date from the end of the 2nd century A D to about the middle of the 9th, or possibly a little later. The great *Chaitya* is one of the earliest here, those on each side may be two centuries later: the latest is probably the unfinished one, which is the first the traveller approaches by the Borivli route, and which dates about the 9th or 10th century A D, or is even still more recent. However this may be, it is certain that, to quote Bishop Heber, "the beautiful situation of these caves, their elaborate carving, and their marked connection with Buddha and his religion, render them every way remarkable"

Most of the surrounding hills are covered with jungle, but the

one in which the caves are is nearly bare, its summit being formed by one large rounded mass of compact rock, under which a softer stratum has been denuded by the rains, forming natural caves, which, slightly improved by art, were appropriated as cells The path runs in a N direction up to the ravine, lying E and W., round which the caves are excavated on six ledges in the mountain side connected by flights of steps Shortly before the end of the ravine is reached, a steep ascent leads up to a platform facing W, where the Great Chaitya Cave (No. 3) is situated, and whence steps lead down to the ravine

Cave No. 3, entered through a forecourt and a veranda, probably dates from the 6th century It is 86 ft long and 40 ft. wide, and has a colonnade of thirty-four pillars, which encircles the dagoba, standing 16 ft. high, at the back A number of the pillars have bases and capitals carved with elephants, dagobas, trees, worship of sacred feet, etc At the ends of the great veranda are two later figures of Buddha, 21 ft high, and over the door is the great arched window, which forms one of the principal characteristics of these structures In front of the veranda are two pillars, and on the screen of the back wall are Buddhist carvings In the forecourt are two attached pillars, on which are four lions and three squat figures On the left of the court is a round cell with a dagoba, and on the right, at the end of a long excavation (No. 2), are three ruined dagobas, with a Buddhist litany (p 69) on the rock round them

At a distance of 150 yds up the ravine, N.W of the Chaitya Cave, is the Darbar of the Maharaja Cave (No. 10), which was a dharmsala, or chapter-house, and not an ordinary vihara It is 73 ft. × 32 ft in size, and has two stone benches running down its longer axis and some cells on the left and back walls The veranda, which is approached by three flights of steps, has eight columns along the front of it

No 14, farther up the same (left) side of the ravine, has some traces of painting, and No 21 has columns of the Elephanta type, a Buddhist litany, and a figure of Padmapani, crowned by ten cobra-heads, in a recess on the right of the porch

Above No 10 is No 35, a vihara 40 ft × 45 ft, with benches round it, and four octagonal columns in the veranda, on the walls are reliefs of Buddha seated upon a lotus, of a disciple spreading his cloak for him to walk upon, and of another litany

N W from these and from the front of No 56 is a fine view of the sea, in No 66 are some fine sculptures and another litany. Some 400 yards to the south, and beyond the Chaitya Cave, is a terrace with monuments over the ashes of Buddhist monks The many cisterns and small tanks round the caves and the flights of steps connecting them are remarkable

(4) **Montpezir Caves** (*Mandapeshwar*).—B B and C.I Railway to **Borivli** Station, 19 m, thence 1 m by tonga. At the caves are a ruined Portuguese church and Franciscan monastery with a cross close by Round the N E. corner of the church are three Brahman caves hewn out of the rock, dating from the 8th century The cave on the E. is 5 ft 8 in × 21 ft. Adjoining this cave to the W is a stone basin for water, of which there is a good supply, said never to fail, and this may be one reason

why the Portuguese built here. The next cave is 27 ft. 3 in. × 14 ft. 9 in. In the W wall is a group of 25 Gana (celestial dwarfs), figures very much mutilated, and a four-armed Siva. In the corner of the outside wall is half a teak door of the church, with two saints carved on it

The third (W.) cave was a vihara (monastery) in which ten or twelve hermits lived, but was converted into a R.C. chapel. In the N. part of the E. wall, upside down, is the stone originally over the entrance door, inscribed with the date 1555. At the N.W. are pillared partitions leading to cells, and on the W. side are two pilasters and four pillars about 12 ft. high, with tapering shafts and angular capitals. The interior measurement of the *mandapam*, or hall, is 51 ft. × 21 ft.

The conversion into a church was effected by the building of a wall in front of it and by screening off the Saivite sculptures or covering them with plaster. This is one of the very few instances of the transformation of a Brahmanical cave-shrine into a Christian place of worship. The King of Portugal, John III., diverted to the church (which was dedicated to N. D. de la Misericordia) the revenues of the temple, which sufficed to support fifty jogis (ascetics), and also built the monastery.

S., on a hill, is a round tower (40 ft. high), which the priest calls a Calvarium, surmounted by a statue of Jesus Christ. An Orphanage has been built close by, and the old church has been restored. There is a good view from the top over the plain.

(5) **Bhayndar** Station, 25 m. from Bombay, is on the S. edge of the Bassein creek, which divides Salsette from the mainland. The railway here crosses the river by a very long bridge (Route 10). On the right, and for some miles up the stream, the scenery is most beautiful—the Kamandrug Hills and Ghorbunder, with the quiet water between them, forming a charming tropical landscape.

(6) Bassein (Vasai) was a Portuguese city from 1534 to 1739, with walls intact, containing many ruined churches and palaces. It is reached by a road, 7 m., from Bassein Road station (D.B. permit from Ex. Engr. P. W. D. Thana, Bombay), 30 m. from Bombay. Taxis available. By starting early in the morning a visit can be made in one day. Food must be taken, also aerated water. Shelter and rest can be had under cover of one of the churches. If the train is taken, the motor should be ordered to return at 2 o'clock for the homeward journey.

The churches belonged to Franciscans, Dominicans, Jesuits and Augustinians, and the *Matriz*, or mother church of St. Joseph, was called the Cathedral. The survey should be completed by a walk round the seaward side of the walls.

The first notice of Bassein is in 1532, when the Portuguese ravaged the neighbourhood. In 1534 they took Damao,[1] which they still hold, and obliged Sultan Bahadur, of Gujarat, then hard pressed by the Emperor Humayun, to cede Bassein in perpetuity. "For more than 200 years Bassein remained in the hands of the Portuguese, and during this time it rose to such prosperity that the city came to be called the Court of the North, and its nobles were proverbial for their wealth and magnificence. With plentiful supplies of both timber and

[1] The poet Camoens distinguished himself on this occasion.

stone, Bassein was adorned by many noble buildings, including a cathedral, five convents, thirteen churches, and an asylum for orphans The dwellings of the Hidalgos, or aristocracy, who alone were allowed to live within the city walls, are described (1675) as stately buildings" (Hunter) Fryer wrote of the town in 1675 "Here were stately dwellings graced with covered balconies and *large windows, two storeys high*, with panes of oyster-shell, which is the usual glazing amongst them (the Portuguese) in India, or else latticed"

On the 17th February 1739 the Mahrattas (Chimnaji Appa) invested Bassein, and the town surrendered on the 16th of May after a most desperate resistance, in which the commandant, Silveira de Menezes, was killed, and 800 of the garrison were killed and wounded, the Mahrattas' loss being upwards of 5000 On the 13th of November 1780 General Goddard arrived with very powerful artillery, and one battery of twenty mortars, which shortly after opened at the distance of 500 yds, did great execution The place surrendered on the 11th December, on which day Colonel Hartley, with a covering force, defeated the Mahratta relieving army, and killed its distinguished General, Ramchandra Ganesh

The Treaty of Bassein with the fugitive Peshwa Baji Rao II was signed on 31st Dec 1802

The Fort, on the Bassein creek, a little away from the sea, is now entered from the N

The Old Town contains the ruins of the Cathedral of St Joseph and churches built by early Roman Catholic missionaries Several inscriptions remain, the earliest dated 1536. A guide (if procurable) would be useful. Among the ruins are the Church of St Anthony, the Jesuits' church, and convents

3½ N W from Bassein Road stn is **Sopāra**, which is now an insignificant place, but which, up to the beginning of the 14th century, was the principal port of the Konkan. It has been identified by some writers with Solomon's Ophir, on the ground that "Ophir" appears as "Sophir" in the Septuagint version of the Bible Some support of the theory may be found in the fact that the place is also locally known as "Opāra" One of the Rock Edicts of Asoka was found here, but has been lost.

III. By the G.I.P. Railway

(1) The **Vehar Lake** can be reached by car from Kurla stn (10 m) on the G I P. Ry, and is close to Bhandup stn (17 m) on the same line But the most convenient method of approach is by motor from Bombay, either by Sion Causeway and Kurla, or by Mahim Causeway and Andheri The road from Bombay to Thana (if the route *viâ* Kurla is chosen) is left soon after Kurla. If the visitor proceeds *viâ* Mahim and Bandra, he takes a cross road at Andheri The lake covers 1400 acres, and measures 2 × 1½ m; it was made (1856-59) by Mr Conybeare, C E, by damming up the Garpur river. It can supply 8,000,000 gallons of water a-day The embankment is 30 ft broad and 30 ft above the water The water is 75 ft deep, of which 50 ft are available for the supply of Bombay and 25 ft are kept for *settling* There are many crocodiles in the lake fish life is not very abundant in consequence

Tigers are now unknown, but many have been killed here One, shot by Mr Robertson, C S, had killed sixteen persons *Pawai Lake*, lying below Vehar, was formed by the Municipality in 1890 Its water is now used to supplement the main supply

The *Tulsi Lake*, which lies 2 m to the N., was completed in 1879, and water is carried thence to the top of Malabar Hill, 2 m N again are the Kanheri Caves

(2) **Mumbra** (station 25 m from Bombay on the G I P line to Poona) is a favourite week-end resort The Mumbra Creek is a fine stretch of water, and the background of wooded hills completes a charming picture The scenery on the Vihas river between Mumbra and Bassein Creek has been compared to the Rhine from Mainz to Cologne

(3) **The Tansa Water Supply** (G.I P Railway to Atgaon Station, 59 m, D B)—The increase in the population led the Corporation to construct a reservoir (planned 1872) on the Tansa River, about 55 m N E of Bombay, which was formally opened by H E the Viceroy, Lord Lansdowne, in 1892 The Dam, which encloses the valley of the Tansa River, completed 1891, is of a uniform height of 118 ft., and is 2 m long, 103 ft. thick at the base, and 24 ft at the top where a flagged road runs along it. The lake, originally 8 sq. m. in area, has been twice enlarged, and huge mains, 6 ft in diameter, have been laid down

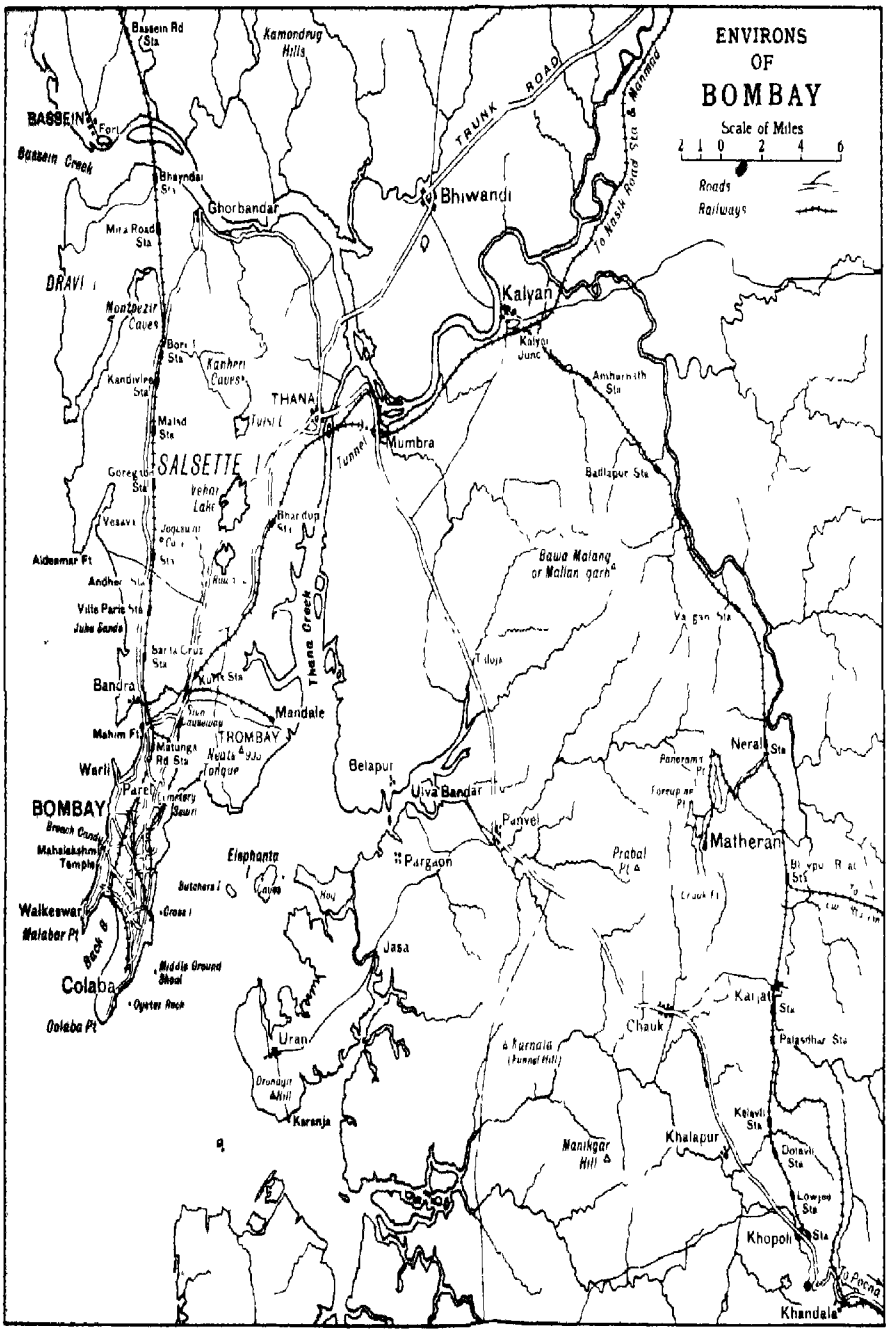
The hot wells of Vajrabai, or Vajreshwari, 12 m N of Bhiwandi (Bundy) near the bed of the Tansa river in the village of Wadowli (Vadavli), were very popular in the 18th century and largely used by Europeans. James Forbes in his *Oriental Memoirs* describes them as consisting of a small cistern with water at a temperature of 120° Fahr. Except that it contained no iron, the water tasted like that of Bath With the discovery of Mahabaleshwar (p 534) in 1826-29, the wells ceased to be frequented by Europeans, but are still popular with Indians

(4) The **Thal and Bhor Ghats.**—These inclines pass through some of the prettiest scenery in all India Those who do not travel by railway trains in daylight should make a point of visiting them separately

The **Thal Ghats** can be seen by a trip to Igatpuri (85 m) (Route 2, p 37), it is possible to return the same day after taking refreshment at Igatpuri Station

The **Bhor Ghats**, passed on the route to Poona (Route 26, p 512), are even finer than the Thal Ghats, and should not be missed At **Khandala** *, 78 m from Bombay, beautiful scenery can be enjoyed, especially in September A visit to the Karli Cave can be combined with a trip to Khandala, but this is best reached from Lonavla (see below)

There are excellent metalled roads up both Ghats, and motor-cars find no difficulty in making the ascents The main road to the Bhor Ghat (1830) goes from Thana by way of Mumbra Creek and Panvel (43 m) to Khopoli (65 m from Bombay) and Khandala (71 m.). There are a few hairpin bends, but the majority of the turnings are on the right For the Thal Ghat the best route is to proceed about


ENVIRONS
OF
BOMBAY
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2 1 0 2 4 6
Roads
Railways
TRUNK ROAD
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Kamondrug Hills
BASSEIN
Fort
Bassein Creek
Bhayndar Sta
Ghorbandar
Mira Road Sta
Bhiwandi
DRAVI
Montpezir Caves
Kalyan
Kalyan Junc
Amberanith Sta
Kandivlee Sta
Kanheri Caves
THANA
Malad Sta
Tunnel
Mumbra
SALSETTE
Goregaon Sta
Vehar Lake
Vesavi
Bhandup Sta
Badlapur Sta
Aldesmar Pt
Andheri Sta
Bawa Malang or Malian garh
Ville Parle Sta
Juhu Sands
Thana Creek
Vagan Sta
Santa Cruz Sta
Kurla Sta
Bandra
Mandale
Mahim Pt
Matunga Rd Sta
THROMBAY
Neuta Tongue
Nerul Sta
Belapur
Worli
Parel
Uiva Bandar
BOMBAY
Panvel
Matheran
Breach Candy
Mahalakshmi Temple
Elephanta Caves
Pargaon
Prabal Pt
Walkeswar
Malabar Pt
Butchers I
Cross I
Back Bay
Jasa
Middle Ground Shoal
Colaba
Oyster Rock
Colaba Pt
Kalyan Sta
Chauk
Uran
Palaspthar Sta
Karanja
Kalavli Sta
Khalapur
Manikgar Hill
Donavli Sta
Lowjee Sta
Khopoli Sta
Khandala

8 m. along the road to Panvel and then to take the Kalyan road (which turns off to the left) to Bhiwandi (6 m. from Kalyan). Here the main road to Igatpuri and Nasik is met

(5) **Matheran**, by rail to Neral stn. (G I P Ry.), 54 m from Bombay, thence by steam tramway, 13 m (see Route 26, p 512) Fine views of Bombay.

(6) **Karli Cave**, reached from Lonavla station (R), 80 m , or by road (168 m) from Bombay (see Route 26)

(7) **Poona** by Poona Express (day), 119 m from Bombay (see Route 26, p 518) The ancient Mahratta capital

ROUTE 2.

BOMBAY TO CALCUTTA by **Kalyan**, **Nasik**, **Manmar**, **Jalgaon** (Caves of Ajanta), **Bhusawal**, **Khandwa**, **Itarsi**, **Piparia** (for **Pachmarhi**), **Jubbulpore** (for the **Marble Rocks**), **Katni**, **Manikpur**, **Allahabad**, **Mughal-sarai** (Benares), and thence to **Asansol** and **Howrah** *viâ* (*a*) E.I R Grand Chord, by **Gaya** (Buddh Gaya) and **Parasnath**, and (*b*) E I R. main line by **Arrah** and **Patna**

Rail 1349 m (G I P R and E I R) to Calcutta

For continuation to N India, see Route 9

Fares [1]—Luggage—free, 120 lb., 60 lb , and 30 lb. , halve those figures to obtain seers, the Indian standard of weight Surcharge for air-conditioned coaches. The 85 m (electrified) between Bombay and Igatpuri should be passed in daylight

On leaving Bombay, between Sion and Kurla, the railway passes on a causeway from the island of Bombay to the larger island of Salsette There are four tracks as far as Kalyan since 1917.

10 m. **Kurla** station Close by (right) are cotton-mills, the first started The Vehar Lake can be visited from here The first electric railway in India was opened from Bombay to Kurla, for suburban traffic, in 1925

17 m **Bhandup** station for the N. shore of the Vehar Lake (p. 33)

[1] The railway time-tables should be consulted. Messrs Thos. Cook & Son issue tickets available sixty days, allowing break of journey at any station *en route*.

21 m. **Thana station** (D.B., and a *dharmsala* for Indians). The railway to this point was the first opened in India (1853). An early Portuguese settlement, commanding the most frequented route from the mainland to the island of Salsette. Marco Polo (1298 A.D.) says: "Tana is a great kingdom, lying towards the West. . . . There is much traffic here, and many ships and merchants frequent the place." In 1320 four Christian companions of Friar Odoricus suffered martyrdom here. Friar Jordanus narrates that he baptized about ninety persons ten days' journey from Thana, besides thirty-five who were baptized between Thana and Sopāra.

The country round Thana was highly cultivated, and was studded with mansions of the Portuguese, when, in 1739, it was wrested from them by the Mahrattas. In 1774 the Portuguese sent a formidable armament from Europe with the avowed object of recovering their lost possessions. The Government of Bombay determined to anticipate their enterprise, and to seize upon the island for the English. A force was prepared under General Robert Gordon, and Thana was taken after a siege of three days. On 6th March 1775 the Pretender Peshwa Raghoba, by the Treaty of Surat, ceded the island of Salsette in perpetuity.

In 1816 Trimbakji Dangha, Minister of Baji Rao II., the last Peshwa, effected his escape from the fort of Thana, though guarded by a strong body of European soldiers. The difficulties of this escape were greatly exaggerated, it was compared to that of Sivaji from the power of Aurangzeb. The principal agent in this exploit was a Mahratta horse-keeper in the service of one of the British officers of the garrison, who, passing and repassing Trimbakji's cell, sang the information he wished to convey in a careless manner, which disarmed suspicion. Bishop Heber, who had seen Trimbakji in his prison in the fort of Chunar, was much interested in this escape, and writes:—

"The groom's singing was made up of verses like the following—

"'Behind the bush the bowmen hide,
The horse beneath the tree,
Where shall I find a knight will ride
The jungle paths with me?

"'There are five and fifty coursers there,
And four-and fifty men,
When the fifty fifth shall mount his steed,
The Deccan thrives again.'"

The English Church was being built when Bishop Heber arrived, and on 10th July 1825 was consecrated by him. In the 16th century the *Silk Industry* here employed about six thousand persons. It is now believed to be confined to one family.

34 m. **Kalyan** junction (R.). Here the line to Madras through Poona and Raichur branches off S.E. (Route 26). This is a very ancient town. In 1780, the Mahrattas having cut off the supplies from Bombay and Salsette, the British Government determined to occupy the Konkan opposite Thana as far as the Ghats. Accordingly several posts were seized, and Kalyan amongst them, and here Captain Richard Campbell was placed with a garrison. Nana Farnavis forthwith assembled a large force to recover Kalyan, on which he set a high value, and attacked the English advanced post at the Ghats, and killed or made prisoners the whole detachment. He then compelled Ensign Fyfe, the only surviving officer, to write to Captain Campbell that, unless he surrendered, he would put all his prisoners, twenty-six in number, to death, storm Kalyan, and put all the garrison to the sword. To this Campbell replied that "the Nana was welcome to the town if he could take it."

After a spirited defence he was relieved by Colonel Hartley, on the 24th May, just as the Mahrattas were about to storm. The remains of buildings round Kalyan are very extensive, and Fryer, who visited the place in 1676, "gazed with astonishment on ruins of stately fabrics, and many traces of departed magnificence"

Between Kalyan and Igatpuri the railway (completed 1865) ascends from the Konkan to the Deccan plateau by the mountain pass known as the **Thal Ghat.**

50 m **Vasind**, alt 178 ft The incline up the Thal Ghat commences Most beautiful in September owing to the wild flowers. The country below the Ghats is inundated, and the Ghats themselves all cascades and torrents

59 m **Atgaon** station, for Tansa Lake (p 34)

75 m. **Kasara** station (R), 930 ft above the sea Here the steeper ascent of the Ghat begins In 9½ m the line (opened 1865) ascends 1050 ft higher from Kasara to Igatpuri There are ten tunnels of an aggregate length of 2281 yards five viaducts and eleven bridges

At 79½ m was the Reversing Station, avoided (1917) by a realignment The Ehegaon Viaduct is 182 ft above the valley The ascent terminates at 85 m, **Igatpuri** D.B (R), where the electrification also terminates

Igatpuri, properly Wigatpura, "the town of difficulties," so-called on account of the precipitous road, is a sanatorium, 2000 ft above the sea, and summer resort of Europeans from Bombay Halt a mile from the station a picturesque lake supplies Igatpuri and Kasara with excellent water. The line to Manmad was opened in 1861, the rails having been carted up the Thal Ghat before the work there was finished To the south can be seen the peak of Kalsubai (5427 ft.), the highest mountain in the Presidency, and Sivaji's hill forts of Alang, Bitangad, Aundha, and Arr

91 m Ghoti The Wilson dam (270 ft high) is 21 m S The Darna river dam, an important irrigation work finished in 1912, is 2 m from Asvali station (101 m)

113 m. **Deolali** station Transit camp for troops arriving from or proceeding to Europe Also a hill-resort much patronised by Parsis and others from Bombay

117 m **Nasik** Road station * D B The town, the *Nasika of Ptolemy*, 2000 ft above sea-level (population 45,744), lies 5 m N W of the station A tramway and taxi-cabs convey passengers The Security Printing Press (1925), the Currency Note Press (1928), and a Police Training College are large establishments The Royal Western India Golf Club course at Nasik is a favourite resort for the residents of Bombay There is accommodation at the Clubhouse for bachelors and also for married couples English visitors belonging to recognised clubs are eligible for temporary membership The climate is equable and pleasant There is a motor ramp at the ry stn

Nasik is a very holy place of the Hindus,[1] owing to its position on the banks of the sacred river Godavari (the Ganges of the Deccan) flowing to the Bay of Bengal about 19 m from its

[1] The Kumbh Mela (p 60) is held here every twelfth year

source at Trimbak, and may be called the Western Benares The sanctity of the river was revealed by Rama to the Rishi Gautama The Godavari and Ganges are said to issue from the same source by an underground passage

Thirteen hundred families of Brahman priests reside here Hindus of rank on visiting it leave a record of their visit with their Upadhya, or "family priest," for each noble family has such a priest at each celebrated place of pilgrimage In this record are entered the names of the visitor's ancestors, and thus the pedigree of every Hindu chief is to be found in the keeping of these Upadhyas Even Sir Jang Bahadur (1816-1877), formerly *de facto* ruler of Nepal, had his Upadhya at Nasik The late Gaekwar owed his succession to this, for when, in 1874, the Gaekwar, Malhar Rao, was deposed, and an heir sought for, the family Upadhya at Nasik supplied proofs of the young prince's legitimate descent from Pratap Rao, brother of Damaji II, the third Gaekwar

At Nasik the river, here 80 yds broad, is lined on either side with flights of steps, and dotted with temples and shrines, and the view along the banks when hundreds of men and women are bathing is extremely picturesque. The part of the town which stands on the right bank of the river is built upon three hills, and is divided into the **New Town** N and the **Old Town** S The quarter on the left bank, where are the chief objects of interest, is called *Panchavati* The manufacture of brass and copper ware, especially of idols, caskets, boxes, chains, lamps, etc, flourishes here. Specimens of the beautiful old work may occasionally be found in the "old" copper bazar

The temples at Nasik, though picturesque, have no striking architectural features. The **Sundar Narayan Temple** stands at the head of the Ghats on the W. side of the city, close to the Sati gate and ground, and is a miracle of art. A marble tablet over the E doorway records that it was built in 1756 by one of Holkar's Sardars The cost of the temple and the flight of 68 steps which lead to the river, is said to have been about 10 lakhs Once a year, on the Kartik full moon (Nov - Dec), the temple and steps are brilliantly lighted Below the temple may be seen the temples of *Balaji* and of the *White Rama*, and the *Memorial*, erected to the Raja of Kapurthala, who died in 1870, near Aden, on his way to Europe From it the river is crossed by the Victoria Bridge, completed in 1897.

Half a mile to the E, on the Panchavati side, is a fine house of the Rastia family From here a walk a few hundred yards up a lane leads to five very old and lofty banyan trees (*Ficus indica*). Under the largest is a small building which marks the entrance to the **Sita Gupha**, or Sita's Cave. (None but Hindus may pass the vestibule) It consists of a low front room, from which steps descend to two apartments 5 ft square and 4 ft high In the first room are images of Rama, Sita, and Lakshman. In the second is an image of Mahadeo, 6 in high, which those three personages are said to have worshipped, hence arises the extreme sanctity of the place, which is quite one of the holiest in Nasik Behind the shrine of Mahadeo is said to be the entrance to an underground passage, now blocked, which led 6 m. N to Ramsej Hill, where Rama used to sleep. The cave was Sita's hiding-place, and it was from here that Ravana, disguised as a religious mendicant, carried her

away to Lanka (Ceylon) Near the cave is the great temple dedicated to **Kala Rama**, or "Black Rama," which cost £70,000 It stands in an oblong stone enclosure, with ninety-six arches. To the W, up stream, and just before reaching the river-side, is the oldest temple in the place, **Kapaleswar**, "God of the Skull," a name of Siva The ascent to it is by fifty stone steps It is said to be six hundred years old, but there is no Nandi bull in front Opposite to it the river foams and rushes in a rocky bed. Rama is said to have passed his long banishment at Nasik **Rama Kund** is the place where the god is said to have bathed, hence it is specially sacred, and bones of the dead are taken there to be washed away Down the stream, about 20 yds, are three temples erected by Ahalya Bai of Indore One is a large square building, with a stone foundation and brick superstructure, dedicated to Rama, N of it is a long dharmsala About 200 ft down the stream is **Naru Sankar's** temple, with an elaborately carved portico and a large stone enclosure, this is the last of the temples at the water's edge on the Panchavati side

At the E end of the city on the S bank is the hill of **Sunar 'Ali**, and another called **Junagarh**, or Old Fort, on which is a square building, in which Aurangzeb's chief officials used to reside They command fine views over the city West of these are the **Jami Masjid** and the **Sarkar Wada**, an old palace of the Peshwa (Chief of the Mahrattas), at present used for Government offices Its beautiful carved woodwork has been removed, but there are fine examples in the town

Sharanpur (1½ m) is the seat of the mission founded by the Church Missionary Society in 1835, in the Junawadi part of Nasik, and removed here by Mr W. S Price in 1855 There was connected with this mission an African Asylum for youths rescued from slavery, and from here Livingstone's *Nasik boys* were drawn It was closed in 1875, and the boys were taken to the E coast of Africa A new church was built in 1898

5 m to the S W of Nasik, on the Bombay road, is a group of twenty three **Buddhist Caves**, called **Pandu Lena** (Hinayana), dating from the 1st century B C to the 2nd century A D, and some of which were altered in the 6th or 7th century A D. They are on the easternmost of the three conical peaks which form the extremity of the Trimbak range The caves include three large viharas or halls, and one fine chaitya or chapel, and are excavated at the back of a terrace 350 ft above the level of the plain The path to the caves,[1] which are numbered from W to E, reaches the terrace about the middle of them

Nos 3 and 15 are the most interesting No 3 is a large vihara, measuring 41 ft by 46 ft and having a stone bench and eighteen cells round the sides and end walls In the veranda, behind a decorated screen rail, are six octagonal pillars, carrying four elephants, or bullocks or horses on their capitals, and above these is a frieze of rail pattern, with a band of animals at the bottom of it The sculptured door leading into the cave resembles the gateways of the Sanchi tope (p 162), over it are the three Buddhist symbols of the Bodhi tree (p 57), the

[1] The account of these caves is taken mainly from the monumental work on the *Cave Temples of India*, by Fergusson and Burgess, published by order of the Secretary of State for India in 1880 Those who are specially interested in the subject will find the original work indispensable.

dagoba or tope, and the chakra or wheel of the law, and on each side of it is a guardian dwarpal In the centre of the end wall of the cave is a large relief of a dagoba. The details of this cave and of No 10 are almost identical, but the latter is of much earlier date, the carved screens and rail patterns in both of them are specially noticeable

No 4 is damaged, the next five are marked only by simple rail or other decoration The vihara No 10 measures 43 ft by 45 ft, it dates from shortly after the Karli Cave (p 514), and the carving in it is much more graceful and pleasing than that in the copy of it, No. 3 No 11 is a small vihara with six cells off it, the chambers Nos 12-14, now forming a group, were probably once separate, each forming a small hermitage Nos 15 and 16 are much damaged No 17 is a smaller vihara, measuring 23 ft by 32 ft The veranda, which is borne by octagonal columns, with elephants and riders, is approached by a flight of steps at one end of it and not in the centre, on the wall of the back aisle, separated from the cave by similar columns, is a large seated image of Buddha

No 18 is the Chaitya Cave, oldest and nearly contemporary with the Karli Cave The front, which is decorated with Buddhist railings, dagobas, serpents, and chaitya windows, is extremely effective, the elaborate carving in the head of the doorway under the great window, which is finished with a representation of wooden beams, simulates the wooden framework with which such windows were once fitted The interior measures 39 ft by 22½ ft by 23¼ ft, and is divided by two rows of five plain octagonal columns into a nave and two aisles, at the end of the nave five more columns run round the back of a dagoba 6½ ft. high and 5½ ft diameter.

No. 20, at a lower level, is a vihara with six side cells. No. 21 is the third largest vihara, measuring from 37½ ft. to 44 ft across and 61 ft deep. The veranda is carried by four octagonal columns, with bell-shaped capitals On either side of the hall are eight cells, and in the end wall are three cells and an antechamber, from which two more cells open, all three walls are faced by a low bench The antechamber to the shrine has two carved columns, the door of the latter is flanked by two gigantic dwarpals Inside it is a colossal seated image of Buddha, 10 ft high, attended by two *chauri*-bearers Nos 22 and 23, at the extreme east end of the terrace, are both much damaged, the last and No 2 are Mahayana caves, the rest being older Hinayana works. There are cisterns on the terrace, which affords beautiful views of the country round Nasik

On the road to **Trimbak** from Nasik (18 m W by road) are several stone-faced wells, and at Prayag Tirth, on the right of the road, is a beautiful tank lined with stone, and with stone steps and two small pagodas built by Ahalya Bai Near Anjaneri two conical hills, about 900 ft high, face each other on either side of the road. From these the hills run in fantastic shapes to Trimbak, where they form a gigantic crescent from 1210 to 1500 ft high Below this mountain wall, which has near the top a scarp of about 100 ft., is the small town deriving its name from *Tri*, "three" and *Ambak*, "eye," "the three-eyed" being a name of Siva The Fort stands 1800 ft. above the town, and 4248 ft above the sea

The **Temple of Trimbakeswar**, E of the town, not far from where the Nasik road enters, was built by Balaji Baji Rao, third Peshwa (1740-1761), at a cost of

£90,000 It stands in a stone enclosure, which has no corridor, but a portico, which is the music gallery, and is 40 ft high. The ascent is by steps outside, and non-Hindus are permitted to mount in order to look into the interior of the temple, which none but Hindus may enter A flight of six hundred and ninety steps up a hill at the back of Trimbak leads to the sacred source of the river Godavari, where "the water trickles drop by drop from the lips of a carven image shrouded by a canopy of stone" into a tank below This is the sacred bathing-place of pilgrims, and is called the Kushávart The Sinhast festival lasts for 13 months once every 12 years Bathing is said to cleanse from the worst sins At the S end is a temple to Siva

147 m **Lasalgaon**, *Chandor*, overhung by a fine hill-fort, commanding a pass into Khandesh, is 14 m N by a good road The Maharaja Holkar is hereditary Patel of Chandor, confirmed by a Treaty in 1818 The fort was taken by the British in 1804, and again in 1818

156 m *Summit* station, on the watershed of the Tapti basin flowing into the Arabian Sea and the Godavari flowing into the Bay of Bengal

162 m **Manmad** (Manmar) junction, D B (R), for the Dhond and Manmad chord line between the N E and S E branches of the G I P R The Godavari Valley branch (1900) of the Hyderabad State Ry (metre gauge) runs from here to Daulatabad and Aurangabad (for the Caves of Ellora) and to Secunderabad (Route 4) About 4 m S are the Ankai Tankai Forts, now in ruins, and seven Buddhist caves of some interest Between the caves and the station rises a curious hill called Ram Gulai, ("one finger" hill), surmounted by a natural [illegible] of trap [illegible] 50 or 90 feet high

204 m **Chalisgaon** junction, Headquarters of the West Khandesh District, acquired from Holkar by the Treaty of Mahidpur in 1818 At 7 m is a bridge over the Girna river, on a branch (35 m) at **Dhulia** (D B), which is connected by a motor service with Nardana (District bungalow) on the Tapti Valley railway, 20 m N along the Agra road The Tapti is crossed at Savalda by a bridge (1932) 110 m from Dhulia, on the same road, is Kalghat (Inspection bungalow), on the Narbada, which is crossed by a road-bridge 2260 ft long (toll)

232 m Pachora junction N G branch to Pahur (25 m for Ajanta Caves) and Jamner (35 m)

261 m **Jalgaon** junction for Ajanta Caves (Route 3) H Q of the East Khandesh District, also acquired from Holkar in 1818 The railway to this point was opened in 1862 Formerly the haunt of aboriginal hill-tribes and wild tribes, it has become a prosperous and fertile cotton-growing district, with cotton-gins and presses, and cotton-spinning mills But in the hills that enclose it on the N, E and S, the tiger and leopard still roam and bears are to be found Sambhar and spotted deer are to be shot There are two High Schools and several advanced educational institutions in the city. A civil Hospital has been built by public subscription in memory of his late

Majesty Edward VII. Connected with it is a District Nursing Association, with a capital, publicly [illegible] of Rs 80,000, to supply nurses to this hospital and to district dispensaries

From Jalgaon a branch (1900) runs to join the Tapti Valley railway (p 192) At 3 m is a bridge over the Girna river

Amalner junction, 35 m W from Jalgaon Terminus of the Tapti Valley railway from Surat (160 m) The Fort was taken 1818 by the Khandesh Field Force Amalner has a High School and an Institute of Philosophy, also a cotton-mill an important commercial centre

276 m **Bhusawal** junction (R) (Insp. B available with permission of the Asst -Collector, E Khandesh, Jalgaon , no servants or supplies) An important railway colony (1803) Junction for the Nagpur Branch (Route 7)

A through carriage is run daily from Bhusawal to Surat, *viâ* Jalgaon and Amalner (on the Tapti Valley ry , see above) in connection with the Howrah-Bombay mail *viâ* Nagpur

N of Bhusawal the railway (1866) passes between the Satpura and Vindhya ranges on the W and the Mahadeo Hills on the E , these ranges constitute the geographical divisions between Hindustan (N India) and the Deccan or South-country

279 m the **Tapti Bridge**, 2556 ft. long (1872) The first bridge built was abandoned in consequence of the inferior nature of the stone of which it was constructed The Tapti drains Berar and the Satpura range There is a causeway for road traffic downstream.

310 m. **Burhanpur** station (3 m to town) on the Tapti river road to Amraoti There is a very fine D.B. in the Imad Shahi palace, part of which has been restored Burhanpur has been a place of much importance, and was walled in by the first Asaf Jah in 1731 The neighbourhood contains several Muslim ruins and a curious aqueduct still in use In the town are two handsome mosques—the Jami Masjid and the Bibi Masjid The *Badshahi Kila*—a ruined citadel and palace—is on a height overlooking the Tapti river The Mughal water-works were constructed for the most part between 1618 and 1650

Founded in 1400 A D by Nasir Khan of the Farrukhi Dynasty of Khandesh, the city was annexed to the Mughal Empire by Akbar in 1600 A D It was the capital of the Deccan Province of the empire when in 1614 A D Sir Thomas Roe, ambassador from James I to "The Great Mogul," passed through, and paid his respects to the Viceroy Prince Parviz, son of Jahangir, and it was near here at Zainabad that Shah Jahan's wife, the "Lady of the Taj," died in 1629 (see p 262) In 1635 the seat of government was transferred to Aurangabad (p. 82), but between 1720 and 1728 it was the headquarters of the Nizam Asaf Jah It was occupied by the army under General Wellesley on 16th October 1803, given back to Scindia the next year, and finally passed to the British in 1860.

The principal handicraft is the production of silk cloths embroidered with gold and silver lace, in the same manner as described by Tavernier in 1658. It is also the centre of a gold and silver wire industry, the drawing of which can be seen by arrangement Vines planted by Aurangzeb still produce grapes

322 m. from Bombay is **Chandni** station, 7 m from **Asirgarh**, conspicuous from the railway, standing at an elevation of 2300 ft above sea-level. A conveyance must be arranged for from Burhanpur (16 m) with the assistance of the Tahsildar. It is best to stop a night at Asirgarh R H (all supplies to be taken). The ascent is long, and involves a climb of well over 1000 ft. The fortifications and gateways are in a good state of preservation. The walls were breached (W and E) and the fort captured on 21st October 1803 by Colonel Stevenson, and again taken on 9th April 1819 by Generals Doveton and Malcolm. It was one of the most important forts, being on the main line of communication with the centre of India. Until 1904 it was garrisoned, but the barracks are now dismantled, and some interesting cannon have been removed to Nagpur. At certain times the fortifications are beset by bees, which are very dangerous.

339 m **Dongargaon**, watershed of the Tapti and Narbada basins.

353 m **Khandwa** junction station, D B (R). A civil station (Ratagarh on a ridge N E), the headquarters of the district of Nimar in the Central Provinces. Khandwa was created a municipality in 1867. From here the metre-gauge system of the Bombay, Baroda, and Central India Railway runs N. to Mhow, Indore, and through Western Malwa to Ajmer, and thence to Agra, a favourite route. (See Routes 8 and 10.) The town is supplied with water from Mohghat reservoir (4 miles), and is lit by electric light. Khandwa is a place of considerable antiquity. Four kunds or small tanks, with stone embankments, have been constructed round the town in the direction of the four points of the compass. On the bank of each tank is a temple, but only one of them is in use. The Padma (Lotus) Kund has an inscription of 1132 A D. One of the temples at Rameswar has the appearance of a cave. Khandwa has a town hall, a Normal School and a Government High School.

417 m **Harda** station, D B. good. Headquarters of a Subdivisional Magistrate, and an important mart for the export of grain, cotton and seeds. Here the railway enters the great wheatfield of the Narbada Valley, which extends to Jubbulpore. A good road, starting from Harda, leads to Indore, crossing the Narbada river, boundary of the C P and Berar, at Handia (Fort).

464 m **Itarsi** junction, D B (R). The G I P broad-gauge line to Delhi (Route 9) runs N *viâ* Bhopal (p 160), Bina (junction for Katni, p 46), Jhansi (branch 137 m to Cawnpore), Gwalior (p 176) and Agra (p 259). A branch to Nagpur (186 m) from Itarsi, runs S through Betul opened for through traffic in 1924 (p 135). From Amla in (81 m) a further branch goes E (54 m) to join the B N R narrow-gauge system at Parasia through the Chhindwara coalfield.

The Betul District is cool but malarious; the elevation varies from 1500 to 2200 feet. In the E and S the Mahadeo hills are higher, the Khamla plateau in the S W. corner being 3787 ft above sea-level. The open tract lies in the centre of the District, and grows wheat as its chief crop, surrounding this tract the country is very broken and clad with forest. The Tapti, Narbada and Wardha rivers have sources at the top of the plateau, and find their way to the plains below through rocky valleys, often of

great beauty. The heavy forest in the outlying portions of the district still provides fair big-game shooting, though it is hard to reach owing to the broken character of the country The small-game shooting is poor Thirty-six per cent of the population of the District are aboriginals

Betul, 67 m from Itarsi (D B, small club with golf course), is connected with Ellichpur, Chhindwara, Itarsi and Nagpur by metalled roads Along all these roads there are good rest-houses, or inspection bungalows, 8 or 10 m apart, but they are in charge of *chaukidars* only, and visitors must arrange to bring their own food and servants with them. The only complete D Bs are at Shahpur (on the Itarsi road), at Multai (on the Nagpur road) and at headquarters

The district is well worth a visit, if only for its scenery, the steep sections, where the railway enters and leaves the plateau, afford a most pleasant prospect, especially at the end of the rains or in the early cold weather

505 m from Bombay on the line to Jubbulpore, **Piparya** station. There is a comfortable D B close to the station A good road leads in 32 m S to **Pachmarhi**, the hill-station of the Central Provinces There are many bungalows at Pachmarhi and barracks, which are occupied by the Central Small Arms School and a military Sanatorium. The station is 3500 ft. above sea-level There is a D B at Singanama (19 m.), the ascent from here, which is 12 m. long, is very pretty Good large-game shooting in the forests below the station by special arrangements with the Forest Department beforehand. Motor-cars are available at Piparya, (Pachmarhi Motor Service Company), and single seats in cars, mail bus and motor-lorries; time about three hours There is a Pachmarhi Hotel (a converted D B) close to the Club, and boarding-houses The scenery is very fine, and there are numerous roads and drives leading to view points

A visitor would do well to take his own motor-car Accommodation is strictly limited and in great demand during the season The official *Pachmarhi Guide* may be consulted

On the S edge of the Pachmarhi plateau is **Chauragarh**, a square-headed bluff which rises to 4385 feet in the Mahadeo Hills It is reached through a ravine past the Cave of Mahadeo where a spring flows from beneath an archway 300 ft. within the hill The place is thronged in February and March by pilgrims, who usually take the S.E route from Chhindwara

Between 590 m **Bikrampur** and 597 m. **Bhitoni** the railway crosses the Narbada river The first bridge, which was built in 1863-65, was washed away by heavy floods on 21st September 1926 and the present bridge was opened for traffic in June 1928. It consists of six spans of 169 ft. from centre to centre of the steel trestle piers, and two spans of 40 ft also on steel trestles at either end The whole of the steel, amounting to about 2800 tons, was supplied from Messrs Tata's works at Tatanagar (p 142)

616 m **JUBBULPORE** junction, 733 m from Calcutta by Allahabad route (R) An important civil and military station, established 1819 The meeting-place of the G I P and East Indian Railways in 1870, but the G I.P now administers the line up to Naini junction A N.-G

railway runs to Nainpur junction (whence there are branch lines running W to Seoni and Chhindwara and E. to Mandla), 69 m S. of Jubbulpore, and 73 m farther on to Gondia junction, on the Bengal-Nagpur line (p 137) The town is about a mile from the railway station and divided from the cantonment on the S by the railway The Great North Road from Nagpur to Mirzapur has been diverted to a submersible bridge at Tilwaraghat, 4 m lower down the Nerbudda from the old ferry This bridge is 1222 ft long, with six main arches of reinforced concrete and 98 ft clear span, completed in 1932 The N-G railway bridge (p 137) is nearly 3 m above the ferry

Jubbulpore (1318 ft) ranks as the second city in the Central Provinces Water is plentiful near the surface, and the climate is comparatively cool The town (pop including cantonments, 178,339) and station are well laid out and well cared for The Victoria Town Hall has a statue of the Queen-Empress There are Protestant and Roman Catholic Churches, six High Schools and three colleges, Training College and Robertson College (founded at Saugor in 1836, and transferred here in 1873), and the Hitkarni College in the city It is the headquarters of the Jubbulpore Brigade area

A mile N E of the railway station is the Government gun-carriage factory Close to the railway station is a well-furnished *dharmsala*, named after the late Raja Gokuldass, whose statue is placed in front of the building

In the administration of India by the English few subjects have created more interest than the suppression of the **Thags** (*Thugs*), a fraternity devoted to the religious murder of human beings by strangulation The principal agent in hunting down these criminals was Colonel Sleeman,[1] appointed 1829, and it was at Jubbulpore that a number of Thag informers and their families were formerly confined, and the once-famous "School of Industry" was established in 1836 by Capt Low Originally there were 2500 of these people in confinement here The "School" was closed in 1889, and is now used as a Reformatory School for boys and as an Industrial School, where carpentry and other crafts are taught

The **Marble Rocks**, known to Indians as Bhera Ghat, are 13 m from Jubbulpore About 4½ m to the W is a remarkable ancient fortress of the Gond Kings, known as the Madan Mahal, which is perched on the summit of a huge granite boulder At 9½ m a branch road turns to the rocks On the high ground above the lower end of the right side of the gorge are two small D B s, and 100 yds beyond the bungalow is a flight of 107 stone steps, some of them carved, which leads to the *Madanpur Temple*, surrounded by a circular stone enclosure All round it are figures of the sixty-four Joginis, much mutilated Three-quarters of a m beyond the temple hill the Narbada may be reached above the gorge at the point where its waters plunge down the Dhuándhar or Smoke Cascade into the cauldron at the upper end of the Marble Rocks In a recess below the bungalow is the embarkation place for a trip by boat up the gorge. Two men to row and one

[1] Colonel Sir W Sleeman's *Rambles and Recollections of an Indian Official* and *Diaries in Oudh* are among the most fascinating books ever written on India Meadows Taylor's *Confessions of a Thug* is the finest of all his works although he took no part. Dr. O. P Bhatnagar denied (1939) a religious motive, considering them dacoits.

to steer are required. The white cliffs of magnesian limestone are only 90 ft to 105 ft high, but the effect of the gleaming faces and rifts is extremely picturesque, especially under moonlight, the water is said to be 150 ft. deep in places Near the entrance to the gorge, which is about 1 m long, is a spot named the "Monkey's Leap" Farther on is an inscription cut on the right side by order of Madho Rao Peshwa, and near the end of the gorge are some curiously shaped rocks called the *Hathi ka paon*, or Elephant's Foot The gorge is closed by a cascade waterfall over a barrier of rocks There are usually large nests of wild bees on the rocks, and care must be taken not to excite them by smoking or firing guns Near the landing-place is a memorial of a young engineer officer who was drowned in seeking to escape the attack of infuriated bees

The railway from Naini was opened in 1867 by the East Indian Railway

640 m from Bombay, **Sihora Road** station.

At **Bahuriband** (17 m N W) is a Jain statue 12 ft high This place is believed to be the Tholobana of Ptolemy Many ruins of temples are found here A Sati pillar, dated 1298 A D., may also be seen

At **Rupnath**, 3 m from Bahuriband, and about 19 m from Sihora Road railway station, there is a rock edict of the Emperor Asoka, engraved about 232 B C It is the oldest inscription, and the only one of its kind, in the Central Provinces.

673 m. **Katni** junction for the loop (210 m) from Itarsi (p 43), *viâ* Bhopal (p 160), Bina and Saugor (p 168), branch S E. to the coal-fields at *Umaria* (Rewah State), 36 m, and thence to Bilaspur (197 m) on the Bengal-Nagpur Railway (p. 140). Katni, near the source of the Son river, is famous for the manufacture of lime and cement and the preparation of stone slabs

At **Bilahri**, 8 m S W of Murwara, which adjoins Katni junction, images and sculptured stones are scattered all about the village and built into the houses, but few temples now remain A small fort was partly destroyed during the Mutiny of 1857

At **Bargaon** (6 m from Salaiya station, 33 m from Katni, on the Katni-Bina line) is a temple dating from the 5th or 6th century A D. Several other ruins—Brahmanical and Jain—are about a mile to the west, on the banks of the Katni river are more remains The stones are beautifully carved

734 m **Satna** station (R and Govt D B) A town in the Rewa State, and the headquarters of the Bundelkhand Political Agency A good motor road runs E, connecting to the Great Deccan Road (21 m), whence **Rewa** (31 m, altitude 1042) can be reached

To the W is a motor road to Khajraho (p 175) and Jhansi Near Satna were found the remains of the Bharhut stupa (180 B C), removed to the Calcutta Museum (p 110) At Bandhogarh, S of Rewa, 23 important inscriptions (200-400 A D) close a gap in Indian history

The ruler of Rewa State, H H Maharaja Sir Martand Singh Bahadur, succeeded in 1946

782 m. **Manikpur** junction station. From this place the G I.P. line runs W (1889) to Jhansi, 181 m. (p. 170), at Khairada junction (69 m. from Manikpur), branch (1914) to

Cawnpore (79 m.) crossing the Jumna river (35 m.) by a bridge 8156 ft. long (1914).

The Bombay-Calcutta mail train and the Imperial Indian Mail train do not touch Allahabad but drop passengers for that place at **Chheoki** stn., which is about 5 m. from Allahabad junction. From Manikpur ordinary trains proceed direct to

840 m. **Naini** junction (R.). Close by is the **Jail**, one of the largest in India; there are also a Leper Mission and Asylum here. The E.I. railway reached here in 1864. 2 m. farther the line crosses the Jumna by a bridge (14 spans of 205 ft. and 3 of 30 ft., opened 1865), and enters

844 m. **ALLAHABAD**[1] junction* (alt. 312), 512 m. from Calcutta. The official capital of the United Provinces (pop. 260,360) and seat of a premier University and a High Court (established 1866). It is situated on the left bank of the Jumna, on the wedge of land between it and the Ganges. The Curzon Bridge (on the E.I. Ry.), 3200 ft. long (1905), and the B. and N.W. Ry. Izat bridge, 6830 ft. (1912), cross the Ganges N. and E. of the city.

The Fort[2] stands near the junction of the two rivers. The Civil Station, Cantonments and City stretch W. and N.W. 6 m. from this point. The present Fort and City were built by Akbar in 1583 A.D., but the Aryans possessed a very ancient city here called Prayag, which the Hindus now call Prag (place of sacrifice). It is a very sacred place with them, as they believe that Brahma performed a sacrifice of the horse here, in memory of his recovering the four Vedas. The merit of almsgiving to Brahmans is enhanced a thousandfold if the gift is made at Prayag.

In 643 A.D. Hiuen Tsang, the Buddhist pilgrim, visited and described the town. It was first conquered by the Muslims in 1194 A.D., under Shahab-ud-din-Ghori. It received the name of Allahabad in 1584 A.D., and was made the capital of a Province. At the end of Akbar's reign Prince Salim, afterwards the Emperor Jahangir, governed it and lived in the Fort. Jahangir's eldest son, Khusru, rebelled against him, but was defeated in 1606 and put under the custody of his brother Khurram, afterwards the Emperor Shah Jahan. Khusru died in 1622, and the *Khusru Bagh* (see p. 48) contains his mausoleum. In 1739 Allahabad was taken by the Mahrattas, under Raghoji Bhonsla, who held it till 1750, when it was sacked by the Pathans of Farrukhabad under Nawab Ahmad Khan. Clive met the Emperor Shah Alam here in 1765 and concluded a treaty by which the diwani (revenue-collection) of Bengal, Bihar and Orissa was granted to the E.I. Company.[1] Thereafter Allahabad changed masters several times, until in November 1801 it was ceded, by Saadat Ali Khan, Nawab Wazir of Oudh, to the British, who had reoccupied the Fort since 1798.

Allahabad was the headquarters of the Government of the N.W. Provinces from 1834 to 1835, when the Lieut.-Governor moved to Agra. In 1858, Lord Canning's famous Durbar was held here, after the suppression of the

[1] *Prayag or Allahabad*, a handbook (Calcutta, 1910).

[2] A map faces p. 50.

[1] A picture commemorating this historic event may be seen in the Victoria Memorial Hall at Calcutta (p. 115).

Mutiny, when Queen Victoria's memorable Proclamation of 1st November, announcing the transfer of the government of India from the E.I Company to the Crown, was read It then again became the seat of the N W P administration In 1902 the N W Provinces and Oudh were amalgamated as the United Provinces of Agra and Oudh under a Lieut-Governor, who was replaced in 1920 by a Governor The Governor of the Provinces is H E Dr B C. Roy, who assumed office in 1947

In the spring of 1857 the station, with its Arsenal and strong Fort, was garrisoned by a Sepoy Regiment, the 6th, to which, on 9th May, a wing of the Ferozepore Regiment of Sikhs was added A few days later sixty British invalid soldiers were brought in from Chunar On 5th June most of the Europeans moved into the Fort, thus adding about 100 volunteers to the garrison The next day the 6th mutinied and murdered their officers The eighty men of the regiment on duty at the main gate of the Fort were at once disarmed, the 400 Sikhs remaining staunch, under the influence of their C O, Captain Brasyer, though they wavered Outside the Fort anarchy reigned in the city—the jail was broken open, and the prisoners murdered every Christian they met Hindu pilgrims were robbed and the houses of wealthy Indians were set on fire A Maulvi, Liaqat Ali of Mahagaon, Chail, in the District, was put up as Governor of Allahabad, and took up his quarters in the Khusru Bagh On the 11th of June General Neill arrived in the Fort, with a body of Madras Fusiliers, and on the morning of the 12th burned Daraganj and regained possession of the bridge of boats, thereby securing a passage for another detachment of Fusiliers from Benares. General Neill then drove the rebels out of the neighbouring villages. The Maulvi fled to Cawnpore, and on the 17th June British authority was re-established in the city General Havelock reached Allahabad on 30th June, and left for the relief of Cawnpore on 7th July.

The **Khusru Bagh**, close to the railway station on the S side, is entered by an old archway, nearly 60 ft high and 46 ft deep, overgrown with creepers Within the garden are three square mausolea That (domed) to the E is the tomb of Prince Khusru W. of it is the grave of a sister of his, and W again that of his mother, a Rajput lady They are shaded by some fine tamarind trees The interior of the mausoleum of Khusru is ornamented with many Persian couplets, and with paintings of trees and flowers, which are now faded The cenotaph of white marble is on a raised platform, without inscription To the right and left two of Khusru's sons are buried All three monuments have been put into a thorough state of conservation E of the gardens is the Indian city.

On the north side of the railway lies **Canning Town**, the older European quarter, laid out amongst a network of wide avenues Just outside the Railway Station is the Municipal Museum, established in 1931 The museum contains a remarkable collection of great archæological value from Bhita. The terra-cotta collection, in particular, is simply invaluable.

The museum also houses a collection of a Russian, Prof Nicholas Roerich's original paintings, and in another, the paintings of Prof Asit Kumar Haldar Attached to the museum is "Doctor Jaya Krisna Vyas" Library, which contains over 6000

old and valuable Sanskrit manuscripts The coin cabinet of the museum is notable for ancient Indian coins

The **High Court** and **All Saints' Cathedral,** in the 13th-century Gothic style, 225 ft long by 40 ft broad, built of red and white stone, are N of the railway station The throne is a memorial of Bishop Johnson of Calcutta and Metropolitan of India (1876-98) The organ is exceptionally fine. There are memorial windows of Sir John Woodburn, Lady Muir, wife of Sir William Muir (Lt - Governor, 1868 - 74), and others The **Roman Catholic Cathedral,** in the Italian style, with the Bishop's Palace, a Convent and Boys' and Girls' Schools, finely laid out, are W of the Alfred Park, and near by is the Club. There is also the Macpherson Park in Cantonments

In the Alfred Park is the **Thornhill** and **Mayne Memorial,** with a fine public Library. It commemorates two former Commissioners of the Allahabad division The Empress Victoria memorial statue, also in the Alfred Park, is a seated marble figure under a stone canopy. Beyond the park is the Government House, and to the N. of the Alfred Park is the **Muir College,** in the Saracenic style, with a tower 200 ft high Close by to the W is the *Mayo Memorial Hall*, with a tower 180 ft. high The University (residential) was founded in 1887.

Holy Trinity Church is opposite the University Buildings, near Prayag Ry Station It contains a tablet in memory of those who perished in the Mutiny, another commemorates four officers of the Buffs who were killed or died during the Gwalior campaign of 1843

8 m W. is the important **Bamrauli** Aerodrome Allahabad is H.Q. of the All India Gliding Institute There is a Flying Boat base on the Jumna.

Canning Road and Fort Road lead to the Fort, built by Akbar in 1583 A D , it forms a striking object from the river The principal gateway is capped with a dome, and has a wide vault underneath it The walls are from 20 ft to 25 ft high ; below them is a moat which can be filled with water

Asoka's Pillar —In front of the gateway inside the Fort is the Asoka Pillar, which rises 35 ft above ground It is of stone, highly polished, and is of much interest It was probably brought here from Kaushambi (p 51) by Firoz Shah Tughlaq, but some say by Akbar It was found lying on the ground in the Fort in 1837, and was then re-erected On it are inscribed the famous Edicts of Asoka (issued about 242 B C), and also a record of the victories (about 340 A D) of Samudragupta (*circ* 326-375 A.D), and one by Jahangir (1605-27), to commemorate his accession to the throne There are also minor inscriptions, beginning almost from the Christian era. According to James Prinsep p 113), who deciphered this and other Asoka inscriptions in 1838, the pillar was lying on the ground when some of the inscriptions were cut

Access to the **Zenana building** of the old Palace, though enclosed by the Arsenal, is now possible, thanks to the care of Lord Curzon, by permission of the Local Military Authority "A square hall, supported by eight rows of columns, eight in each row, thus making in all *sixty-four*, surrounded by a deep veranda of double columns, with groups of four at the angles, all surmounted by bracket capitals of the most

elegant and richest design, and altogether as fine in style and as rich in ornament as anything in India "[1] Attached to the Fort is a powerful Wireless Installation

The Akshai Bat (Vata) or undying banyan.—Hiuen Tsang, the Chinese pilgrim (629-45 A D), who visited *Prayag* 643, gives a circumstantial description of the undecaying tree In the midst of the city, he says, stood a Brahmanical temple, to which the presentation of a single piece of money procured as much merit as that of a thousand pieces elsewhere. Before the principal room of the temple was a tree surrounded by the bones of pilgrims who had sacrificed their lives there

The tree is situated under the wall of the Palace, and is reached by proceeding straight on from the pillar Close by is a deep octagonal well flanked by two vaulted octagonal chambers A few steps lead to a dark underground passage, which goes 35 ft straight to the E , then S 30 ft to the tree As no tree could live in such a situation, the stump is no doubt renewed from time to time Some images are ranged along the passage In the centre of the place is a lingam of Siva, over which water is poured by pilgrims General Cunningham, in his *Ancient Geography of India*, gives an interesting sketch of the probable changes in the locality, and concludes . " I think there can be little doubt that the famous tree here described is the well-known Akshai Bat or undecaying banyan tree, which is still an object of worship at Allahabad "

The ramparts at the N E side of the Fort afford a view of Triveni Ghat, the **Confluence of the Ganges**, which is 1¼ m. broad, flowing from the N., with the **Jumna**, ½ m broad, flowing from the W , and the mythical Saraswati The shallower and more rapid Ganges is of a muddy colour, the Jumna is bluer with a deeper bed The **Magh Mela**, a religious fair of great antiquity, is held at Triveni every year, between 15th January and 15th February, when thousands of pilgrims flock to Allahabad to bathe at the junction of the sacred rivers and every twelfth year the festival is known as the **Kumbh Mela** Kumbh Melas are held in succession every three years at Hardwar (p 412), Allahabad, Nasik (p 37), and Ujjain (p 150) The next is due in 1954 The auspicious day is known as the Amáwas

W of the Fort is the **Minto Park**, with the memorial (1910) of the Royal Proclamation of the assumption of the rule of India by the British Crown on 1st November 1858 It consists of a stone *lat* (pillar), with medallions of Queen Victoria, King Edward VII, and King George V, surmounted by four lions bearing the Imperial coronet A King George V Memorial was unveiled in 1939. Farther W up stream of the E I R Bridge over the Jumna is the Ewing Christian College of the American Presbyterian Mission

The Akbar **Band** runs N E from the Fort to Daraganj Here the B. and N W Ry crosses the Ganges by the Izat bridge of 40 spans of 150 ft each, to Jhusi, and runs 73 m to Benares N of the old Cantonment the railway to Jaunpur (p. 423), Fyzabad, and Lucknow crosses the Ganges by the Curzon Bridge (15 spans of 200 ft)

There are roadways on the Jumna and Curzon railway bridges, by which motors can pass. The

[1] *History of Indian and Eastern Architecture*, by J. Fergusson, J. Burgess, and R P. Spiers, 2, 298

lzat bridge has no roadway, but a *pontoon* bridge carries traffic between 15th Nov and 15th June There is a connection to the Jaunpur and Grand Trunk roads *vid* the Curzon Bridge The old road to Rewa and Jubbulpore is metalled only up to the tenth mile, and beyond this is neglected

The following routes run from Allahabad (1) To Benares, 78 m . and 45 m on to Ghazipur, (2) to Jaunpur, 57 m , Fyzabad, 99 m and Lucknow, 141 m

Kaushambi can be identified with the ruins existing at Kosam, 38 miles from Allahabad up the River Jumna in the Allahabad District A place of great antiquity, it is not very easily reached It is commonly known from Pali Canon as a Buddhist town and the Capital of the Vatsa King Vdayana, a contemporary of Buddha, who flourished in the sixth century B C and was a direct descendant of the Pandavas References to the city of Kaushambi are to be found in the Epics and in the Puranas

Near the village of Kosam are remains of the high bastions and the earthen ramparts of an immense fortress with a circuit of a little over four miles. The ground inside the fort, which is now cultivated, is thickly strewn with old brickbats, the remains of the ancient city of Kaushambi The chief object of archæological interest inside the ruined fort is a highly-polished Asoka pillar with its top broken and capital missing As it stands now it measures nearly 23 ft Unfortunately no inscription of Asoka is to be found on it, although it contains a number of inscriptions ranging from the age of the Guptas to the present day.

Pabhosa. About 2 m W. of Kosam is the Pabhosa Rock, which contains important rock inscriptions Even to-day Pabhosa is a place of pilgrimage for the Jains

Bhita is 11 m by road S W. of Allahabad, and on the opposite side of the Jumna Excavations, conducted by Sir J H Marshall, while Director-General of Archæology, showed that Bhita was the site of a settlement from prehistoric ages, and that it was a fortified city from the Mauryan (B C 321-184) down to the Gupta (320-455 A D) period, when it appears to have been given over to jungle tribes, who were still in the neolithic state of culture

The city is surrounded by an earthen embankment surmounted by a brick wall, 11 ft in thickness, strengthened by bastions outside and by guard-houses within The circuit wall seems to have been pierced by three gateways—one on the west and one in the middle of the north-east and south-east sides Arrow-heads of iron, and numerous sling or catapult balls of stone, marble, and earthenware have been found within the walls, the balls ranging in dates from the 7th or 8th century B C to the later Gupta period (455 - 606 A D) Nearly all the interior of the fort so far excavated is occupied by bazars and houses of considerable size divided up into well-defined blocks by roads and narrow alleys

The latest buildings, of the later Gupta period, are characterised by the smallness of their rooms and the poorness of their construction Below these come structures of the early Gupta or still earlier Kushana (45-225 A.D) period, which are largely constructed out of the remains of

earlier structures, which, forming the third stratum, belong to times preceding the Kushana dynasty, while the fourth and the lowest series of houses belongs to the period of the Mauryas In the debris of each of these strata small articles define the successive periods of occupation

Before the Mauryan epoch kiln-burnt bricks do not appear to have been much used on this site, though fragments of walls testify to their manufacture having been understood for two or three centuries Floors of well-made concrete and of burnt clay occur in the lower strata, which must go back at least some seven hundred or eight hundred years B C, and associated with them are well-made vessels of grey and red pottery (frequently covered with a black metallic glaze), terra-cotta figurines, roof finials, and the like Thus, even in those early ages, the culture represented here was considerably advanced

The brick buildings of the Mauryan and subsequent periods are singularly well preserved, standing in some cases to a height of 10 or 11 ft, in spite of the fact that their walls are mainly built of a single thickness of brick laid in mud, and they are the first examples of complete domestic dwellings which have been excavated in India. Those of the Mauryan and Kushana period contain on an average about twelve rooms on the ground floor, ranged on the four sides of an open courtyard, with what appears to have been a covered veranda along one side, and one or more passages between the chambers giving access to the side streets. One of the corner rooms was utilised for stores or treasure, a deep chamber being sunk below the floor to a depth of as much as 30 ft The walls of private houses which face the main street were not pierced with doors or windows, but presented a blank face on the ground floor and a solid projection, some 4 ft. thick or more, was added in front of them for the purpose of strengthening the walls or of carrying a veranda above. The upper storeys were no doubt constructed largely of wood, and have completely disappeared; but, judging from the foundations, it may be surmised that they were confined to one side of the house only The roofs were protected with terra-cotta tiles and ornamented with pinnacles of the same material, from which it may be assumed that they were sloping A feature in the plans of these houses is their obvious similarity to the monasteries of the Buddhists, which presumably were copied from the domestic dwellings of the time The shops consist of single rows of chambers facing the street, with a raised platform in front, such as are commonly seen in the bazars of to-day

Among the antiquities recovered (in the Museum) the most noteworthy are—seals of ivory, bronze, and stone, and sealings of clay, which furnish the names of the householders and of the places and people with whom they were in correspondence, coins of the Kushana Emperors of the North, of the Andhras of the South, and of the kingdoms of Avanti, Kausambi, and Ajodhya, terra-cotta statues and figurines, well-finished in colour, which portray in detail the costumes of the time; copper and earthenware vessels of manifold shapes and various fabrics; goldsmiths utensils, toilet boxes of steatite and marble, personal ornaments of many kinds, to which may be added also a number of celts and stone implements belonging to jungle tribes who occupied the deserted site

Garhwa is the name given to a walled enclosure which surrounds a group of temples, in a depression among low hills. It is 5 m from Shankergarh, the headquarters of the Raja of Bara which is at 26 m from Allahabad on the Jubbulpore road. About 2 m. of this road just preceding Garhwa is not motorable There are idols of Brahma, Vishnu and Shiva as well as those of the ten incarnations of Vishnu in the Hindu mythology The ruins of the big temple in the centre are supported by 16 stone pillars with beautiful carvings on them Several inscriptions here indicate that most of these buildings were built in the days of Chandra Gupta II, but there are also inscriptions to indicate that this place was famous even before the first century B C

On the west of the ruins of the fort is a big tank about 600 ft long known as Garhwa Tal

Jhusi is on the Benares Road immediately across the Ganges from Allahabad It was the capital of Chandravanshi kings of ancient days and is mentioned as Pratishthanpur in the sacred books of the Hindus It was an important town even in the days of the Gupta dynasty (320-455 A D), and there is still a big well, known as Samudra Koopa, believed to have been constructed by the famous King Samudra Gupta In 1830 an inscription on a copper plate was found here which is at Calcutta with the Royal Asiatic Society of Bengal South of Samudra Koopa is the tomb of a Muslim saint Sheikh Taqui It was built in 1384 A D and a fair is still held there every year

Continuing the Route, at 850 m the Tons river is crossed by a bridge 1194 ft long (1864).

892 m. from Bombay, 458 m. from Calcutta, **Mirzapur** station (D.B. and P W. Inspection Bungalow) Before the opening of the East Indian Railway it was the largest mart on the Ganges for grain and cotton, it is still a commercial centre of importance There are excellent sandstone quarries near, on which Government levies a royalty. Mirzapur is noted for its brass industry, and for its hand-made woollen carpets and rugs, dyed with old native vegetable dyes, which are permanent Shellac is prepared from stick-lac at eighty factories and large quantities of Bengal silk are absorbed for distribution in Upper India There is a handsome river front, with ghats and temples, containing some beautiful carvings. The Civil Station is to the N.E. of the city 6 m from the town is the deserted Cantonment of Tara where there is a fine waterfall of 60 ft. caused by the descent of a rivulet from the plateaux of the Vindhya range

The Deccan road from Nagpur (1863) ends at Mirzapur, which is 241 m from Jubbulpore and 103 m from Rewa. This road is fit for careful motoring in the cold weather Mirzapur to Jaunpur, 46 m., , to Allahabad, 60 m At Bindhachal sta., 4 m W. of Mirzapur, is a Kali temple which used to be a rendezvous of the Thugs

438 m. from Calcutta, **Chunar** has an old Fort on a hill (400 ft high and 2 m. from stn.), commanding the Ganges (now used as a Reformatory for boys). The Emperor Humayun (1530-1556) took it in 1537, but Sher Shah Sur, the Afghan, recaptured it shortly after, and strengthened himself against Humayun. It was recovered by Akbar in 1575, and remained with the Mughals till 1750, when it passed into the hands of the Nawab Wazir of

Oudh. The British stormed it after the battle of Buxar in 1764. To this fort Warren Hastings retreated from Benares in 1781, after Raja Chait Singh's rebellion The tomb of Iftikhar Khan, a Governor in Jahangir's reign, is here There is a stonework screen round the mausoleum of Shah Kasim Sulemani, which stands in a durgah, or walled enclosure Up to 1860, Chunar was the station of the European "invalids" who had enlisted for 21 years, or for life Heber mentions meeting one of them in 1824 "who had fought with Clive" It is still a residence of Anglo Indian pensioners Inspection Bungalow in the Fort, permission to occupy must be obtained from the Executive Engineer, Allahabad

418 m from Calcutta, **Mughalsarai** junction (R) for **Benares Cantonment station,** 10 m distant (Route 5), across the Ganges, crossed by the Dufferin Bridge (p 95)

(*a*) *By E.I R Grand Chord from Mughal Sarai to Asansol via Gaya, Parasnath (for Parasnath Mountain) and Sitarampur*

From Mughal Sarai the Bombay mail train to Calcutta follows the Grand Chord route through Gaya to Asansol (opened 1906)

The Karamnasa river is crossed (see p 60)

386 m from Calcutta and 32 from Mughal Sarai, **Bhabua Road (Inspn. Bung);** 10 m to the S is Bhabua (Inspn Bung) and 5 m to the S W of Bhabua is the ancient Hindu temple of Mundeswari, on the summit of a hill 600 ft. above sea-level, an inscription dates it to 635 A D. Eight miles S. of Bhabua are immense earthwork fortifications They enclosed in a valley an ancient town, the only remains of which are broken bricks covering an area of about 2 sq m.; the foundations of the houses are still below the soil 6 m to the W of Bhabua is Chainpur, once an extensive town There is a fort built by Raja Salivahan, whose descendants reside now at Bhagwanpur, 6 m. S. of Bhabua The fort is now a famous place of pilgrimage, owing to a Brahman priest having done "dharna" or fasted till he died in protest against an injustice A short distance to the W is the mausoleum of Bakhtiyar Khan, a noble of the time of Sher Shah, it is similar to those in Sasaram, standing in an enclosed courtyard Scattered over all this part of the country are the remains of old forts, attributed to the Savars or Suris, an aboriginal people They consist of high mounds of earth, on which used to be situated the house of the local chief, the whole being surrounded by a deep moat Fifteen miles N W of Bhabua Road station is Baidyanath (popularly, Baijnath), containing traces of early and mediæval Brahmanical buildings It is believed to have been the centre of the Savar kingdom

372 m from Calcutta, **Kudra** (D.B). 16 m to the S is the hill-fort of Shergarh, on a small plateau about 800 ft. in height It was fortified by Sher Shah, and a palace, still in a fair state of preservation, was built on the summit Eight miles farther into the hills are the caves of Gupteswar, several hundred feet in length

356 m **Sasaram** junction (D B), electrically lit from Dehri-on-Son (11 m) The name Sahasram (Sahasra Arjunpura) is said to be derived from Arjuna, a chief with a thousand arms, cut off by Parasu Rama A view can be had

from the train of the reddish stone mausoleum of Sher Shah (1540-45), the Afghan usurper Emperor of Delhi, on a terrace approached by a bridge in a tank 1000 ft square The height from the floor to the apex of the dome is 101 ft, the total height above the water being over 150 ft, the dome has a span of 72 ft In the town is the mausoleum of his father, Hasan Sur Khan, killed at Kalinjar, in an enclosed courtyard, and about a mile to the N W is the tomb of his son, Salim Shah, which was intended to be larger than his father's, but was never completed, it also stands in a tank In a small cave just below the summit of a hill rising above the town is an Asoka inscription dating back to 232 B C A N-G railway (61 m) runs from Sasaram to Arrah (p 60) and connects the Grand Chord with the E I R main line

345 m from Calcutta, **Dehri** (D B) Here the river Son is spanned by a girder bridge (opened in 1900), with 93 spans of 100 ft each, the total length being 10,052 ft Above the bridge the Grand Trunk Road crosses the river over a stone causeway, and higher up are the headworks of the Son Canals, consisting of a dam 2½ m. long, with main canals on either side, also generating electricity for tube wells. The G T road terminates on the E bank at Barun (2 Insp Bs) Motor-cars should cross by rail from Dehri on the W. bank to the Son E. bank stn., as the causeway is not passable for cars A N-G. ry runs from Dehri up the river to Rohtas station, 24 m, overlooking which is the ancient hill-fort of **Rohtas** (Inspn Bung.) occupying a plateau 4 m by 5 m. and 1500 ft. above sea-level. The fort was impregnable, being surrounded for the greater part by sheer precipices 500 ft to 1000 ft. in height, with the few comparatively vulnerable points protected by strong defensive works consisting of double and triple lines of ramparts and bastions It is of very ancient origin and was taken from its Hindu ruler by Sher Shah in 1539 by means of a stratagem Man Singh strengthened the fortifications in 1607 but it was peaceably surrendered to Capt. Goddard in 1764 A Mughal Palace in an excellent state of preservation is on the plateau The palace is entered from the W through a great courtyard. The ascent should be made in the cool of the evening, but care should be taken to arrive at the D B on the plateau at the top before sunset (drinking water and provisions should be taken)

342 m **Son East Bank** stn. A line runs to Daltonganj, extended as the Central India Coalfields Railway in December 1928 to Barkakana on the B N Ry (p. 143). Here it meets the B N R broad-gauge line from Kharagpur *viâ* Muri junction, 36 m by N-G. railway from Ranchi the summer headquarters of the Bihar Government (Route 7)

292 m from Calcutta, **Gaya** (D B about 1 m., R room at Station) is a city of 105,223 inhabitants, nearly all Hindus. It is connected with the main line E I R by the S Bihar Ry (30 m) to Lakhisarai and the Patna-Gaya Ry (96 m) to Patna Jn (opened 1870) Motor service (S), Gaya to Ranchi *viâ* G T Road and Hazaribagh There is an aerodrome on the British Overseas Airways route

The district of Gaya, which was included within the ancient kingdom of Magadha, contains many places of great sanctity. The name Gaya is said to have

been the name of an Asura, or so-called demon, so holy that all who saw or touched him were admitted to heaven The rocky hills abound in remains, sculptures, images and sites of the religion of Buddha, many diverted to Hindu worship

The Barábar Caves, 16 m. north of Gaya, and 6 to 8 m. E of Bela railway stn on the Patna-Gaya line, are very old (B C. 264 and 225) and dark Two of the caves have tablets recording their dedication by Asoka himself to the Ajivakas, a sect of Brahman ascetics devoted to Narayan, a form of Vishnu

Gaya is visited by two or three hundred thousand Hindu pilgrims yearly From all parts of India they come to pray for the souls of their ancestors in purgatory, as part of the general course of pilgrimage of which Gaya is the centre There is a lengthy legend to the effect that Vishnu promised that the rock on which the old town now stands should be known as *Gaya-kshetra*, and that whoever offered funeral cakes (*pindas*) and performed the *sradh* ceremonies there should be translated with their ancestors to the heaven of Brahma The pilgrim, before leaving his home, must walk five times round his native village, calling upon the souls of his ancestors to accompany him on his journey. There are forty-five places within an area of 35 sq m. at which the pilgrim should offer funeral cakes, but they usually visit only seven and often only three of the forty-five. Arrived at Gaya, he is forthwith placed in charge of a special Brahman guide, and he has to bathe in the sacred streams of the Phalgu and the Pūnpūn *Pindas* are offered on Ramsila hill, which adjoins the town on the N and also on Pretsila, the Hill of Ghosts (541 ft high), 5 m N W

The centre of the pilgrimage is the **Vishnupad Temple** in the old portion of the town, approachable only on foot, owing to the extreme narrowness of the streets As it is not easy to find, previous intimation should be sent to one of the leading Gayawals (the hereditary priests of the temple), who will, as a rule, most courteously supply a guide. Visitors must remove their shoes if they wish to enter the inner temple

The present temple, built about the year 1787 by Ahalya Bai, ruler of Indore (p 146), is a solid structure of grey granite, the main building is a *mandapa* or open hall, 58 ft square, supported on eight rows of pillars in two storeys, and covered in the centre by a dome The sanctum has an octagonal tower, 100 ft high, with a pyramidal roof, which culminates in a single pinnacle surmounted by a large gilded flag

Within the sanctum is an octagonal basin, 4 ft in diameter, inserted into the pavement and plated with silver, which surrounds the impress on the rock of the god's foot The **Vishnupad** (*Footstep of Vishnu*) is about 16 in long, and 6 in broad Flowers and other offerings are made to it Immediately in front hangs a bell presented by Ranjang Pande, minister of the Raja of Nepal (1838-43), and at the entrance to the sanctum is a second bell bearing an inscription in English. "A gift to the Bishnupad by Mr Francis Gillanders, Gya, 15th January 1790." Gillanders was the Government Collector of the Pilgrim Tax, and died in 1821: his grave is in the old cemetery at the foot of Ramsila Hill

S of the temple, almost touching it, is a pillared hall or porch, with the pillars let into the solid rock, where the pilgrims assemble before making the round of holy

places. In a small shrine on the way to the temple, is the figure of an elephant plucking flowers and fruit, which can be dated to the beginning of the Christian era

N. of the Vishnupad is a temple with a statue of the Sun God his seven horses driven by Arjun are on the pedestal It stands to the W of the Surajkund Tank

Half a mile to the S W., immediately under the Brahmajuni Hill, is the *Akshayabat* or undying banyan tree, at which the pilgrims make their final offerings to the Gayawals and conclude their pilgrimage

A so-called Gaya black stone is carved into ornaments, bowls, and figures of gods and animals In one bowl an image of Basudeva carrying the infant Krishna in his arms, is so contrived that if the bowl is filled slowly, the water runs away without wetting the feet of Krishna.

Buddh (Bodh) **Gaya** is 7 m S of Gaya There is a good metalled road leading up to it The **Temple**, of great antiquity, is closely connected with events of the life of Buddha The shrine is now in the possession of a monastery of Hindu Saivite sannyasis, which was established at the end of the 16th century The building, which in its main features represents the structure seen by Hiuen Tsang in 635 A D , consists of a main tower, 180 ft high, in the form of a truncated pyramid, with a finial springing from a platform, at the corners of which are four similar smaller towers

The entrance is on the E , and on the altar at the W wall of the sanctum is a large gilded image of Buddha, which is worshipped by the Hindu monks as an incarnation of Vishnu. The figure of Buddha, which, according to Hiuen Tsang, was of perfumed paste, was destroyed centuries ago. The Temple is built over an earlier temple erected by Asoka

Much of the stone railing, once believed to be the work of King Asoka, but now known to be of Sunga date, has been restored It has four bars of stone, supported by pillars at intervals of 8 ft The top rail is ornamented with carvings of females with the tails of fish inserting their arms into the mouths of Makaras—that is, imaginary crocodiles with large ears like those of elephants and long hind legs. Below this top bar are three others, also of stone, ornamented with carvings of lotus flowers. The pillars are adorned with carvings of various groups — such as a woman and child, a man with a woman who has the head of a horse, centaurs, and so on Twenty-three of the pillars were found by Lord Curzon in the Hindu Mahant's residence, where they were serving as supports to an interior arcade, and were restored at his instance Some half-dozen others have been removed to the museums at Calcutta and South Kensington Altogether 85 are now *in situ*.

The plinth of the temple is 26½ ft high, and at the top is a space 13 ft broad, which allowed a passage round the tower At each corner of the platform was a small temple, and outside the rail (erected during the Sunga period, 184-72 B.C) were many subordinate temples A few yards to the W of the W wall of the temple is the famous pipal tree, known as the Bodhi tree, under which the Buddha received enlightenment. Under the tree is a red sandstone slab, the Vajrasan or diamond

throne, which is reputed to be the centre of the universe. Round the temple in the sunken courtyard are ranged a number of *stupas* or votive offerings of Buddhist pilgrims

A Burmese inscription records a restoration in 1306-1309 In 1877 permission was granted for a further restoration, but Raja Rajendralala Mitra, who was deputed by the Local Government to inspect their work, stated that "the Burmese carried on demolitions and excavations which in a manner swept away most of the old landmarks" The remains of the vaulted gateway in front of the temple were completely demolished The stone pavilion over the Buddha pad was dismantled The granite plinth beside it was removed The foundations of the old buildings noticed by Hiuen Tsang were excavated for bricks The revetment wall round the sacred tree had been rebuilt on a different foundation on the W The plaster ornaments on the interior facing of the sanctuary were knocked off, and the facing was covered with plain stucco, and a large area was levelled and surrounded by a new wall As a result of this investigation, a third restoration was undertaken by the Government, and completed in 1884 The model used was a presentation in stone of the temple as it existed in mediæval times [1]

To the N W is a small but very ancient temple, in which is a figure of Buddha standing The doorway is finely carved A remarkably beautiful image of Buddha, brought from Japan, is located in a R.H. for Buddhists opposite the temple, but there are no Buddhist monks in permanent residence

[1] For further description of the temple, reference may be made to Rajendralala Mitra's *Buddh Gaya*, Calcutta, 1878, and Sir A. Cunningham's *Bodh Gaya*

The Public Works Department officer is ready to show visitors round the temple

At 290 m from Calcutta the Phalgud river is crossed, bridge 2357 ft long (1899)

At 251 m **Gujhandi** is the watershed of the Ganges and Barakar river basins

245 m **Kodarma:** noted for its mica mines Motor service (S) (42 m) to Hazaribagh

215 m **Hazaribagh Road** (D.B) Motor service (S) to Hazaribagh town (42 m) and (58 m farther on) Ranchi (p 143)

Hazaribagh ★ (2013 ft above sea-level, with a peak of 2817 ft) does not mean 1000 tigers or gardens, but takes its name from Hazari, residence of the Zamindar of Ramgarh from 1772 Good motor roads It may also be reached in 2 hours by motor service (S) from Sarak on the Gomoh Daltonganj railway Lord Northbrook spent part of the hot weather of 1874 here, instead of proceeding to Simla, on account of the famine in Orissa; the house in which he stayed is now the Deputy Commissioner's House There are two hotels The military Cantonment, in which the Ramgarh Battalion was quartered from 1780 onwards, was abolished in 1884 This battalion supported the authority of the administrator of Chota Nagpur The district was formed in 1834 out of the "conquered provinces" of Ramgarh St Columba's College and Zenana Hospital are under the control of the Dublin University Mission

198 m **Parasnath** station, for **Parasnath Mountain** [1] 13 m. N.E.

[1] *See* Chap vi of Mr Bradley Birt's *Chota Nagpur* (John Murray).

along a good motor road to Madhuban at the foot. To the summit of the mountain the distance is 5½ m., the journey, which occupies 2¾ hrs., is made on foot or by chair and bearers. The D.B. on the summit has no provisions or servants, and permission must be obtained in advance from the Dy. Commr., Hazaribagh. (Rent, payable in advance, Rs. 15 a week or part of a week.)

The mountain can be reached from Nimiaghat station (193 m. from Calcutta). There is a D.B. on the Grand Trunk Road, close to the foot of the mountain, 1 m. from Nimiaghat and about 3 m. from Parasnath. The khansamah can send supplies up the mountain. Information should be given beforehand to the sub-Inspector of Dumri Police Station, for coolies. **Dumri** (D.B. with two servants), which is 203 m. from Calcutta by the Grand Trunk Road, is 2 m. from the railway. The Howrah-Dehra Dun expresses stop at Parasnath at night. The journey can be broken at Dhanbad, where there is a refreshment-room.

This far-famed place of pilgrimage is 4479 ft. above sea-level (temple spire 4569 ft.) and is the Eastern metropolis of Jain worship. According to tradition, Parasnath, who was the 23rd Tirthankar of the Jains, was born at Benares, lived 100 years, and was buried on this mountain. The temples are of no great antiquity.

At Madhuban, 1230 ft., are the local headquarters of the Digambara and Swetambara sects of Jains. The principal representatives of the Jains met with in Bengal are the Marwaris, whose home is in Rajputana.

The ascent of the mountain is up a pathway worn by the feet of innumerable pilgrims from all parts of India. Ten thousand still visit the place annually. The path leads through woods with large clumps of bamboo over slaty rocks or gneiss, much inclined and sloping away from the mountain. The view from a ridge 500 ft. above the village is superb. Ascending higher, the path traverses a thick forest of *sal* (*Shorea robusta*), and other trees spanned with cables of *bauhinia* stems. At 3000 ft. the vegetation becomes more luxuriant, and the conical hills of the white ants disappear. At 3500 ft. the vegetation again changes, the trees becoming gnarled and scattered. The traveller emerges from the forest at the foot of a great ridge of rocky peaks, stretching E. and W. for 3 or 4 m.

On the saddle of the crest (4230 ft.) is a small temple, one of many which occupy prominences of the ridge, with a beautiful view. To the N. are ranges of low wooded hills, and the Barakar and Adjai Rivers. To the S. is a flatter country, with lower ranges and the Damodar River.

The twenty-four Jain temples commemorate the attainment of Nirvana (the cessation of individual existence) by twenty of the twenty-four deified saints recognised by the Jains. The principal temple is below the saddle in a hollow facing the S., surrounded by groves of plantain and *Ficus indica*. It contains little but the sculptured feet of *Parasnath and some marble cross*-legged figures of Buddha, with crisp hair, and the Brahmanical cord. A convalescent depot for European soldiers was established in 1858, but was abandoned; the officers' quarters are now utilised as a D.B.

The railway crosses the Damodar river to, 187 m. from Calcutta, **Gomoh**, junction for the Bengal-Nagpur Ry. line to (46 m.) **Adra**; (97 m.) **Bankura**, (142 m.) **Midna-**

pur, and (150 m.) Kharagpur Jn. (Route 7, p. 144) This railway was opened in 1903

169 m from Calcutta, **Dhanbad**, junction for Bhojudih on the Adra-Khargpur line (see above) and (31 m) the Jherria coalfield (p. 65) There is a School of Mines here (1926).

143 m. **Barakar**, headquarters of the Bengal Steel and Iron Co, is on the Barakar river (bridge 1850 ft long) The iron ore, a high-grade hæmatite, is obtained from the Pansira and Buda quarries in the Singhbhum district

141 m **Kulti**, another important industrial centre

138 m from Calcutta, **Sitarampur**, junction of the Grand Chord and the main line of the E I R Thence to Howrah (p. 66)

(*b*) *By E.I R main line from Mughal Sarai to Asansol, via Arrah, Dinapur, Patna and Mokameh.*

The Punjab mail (from Delhi) and the Imperial Indian Mail train (weekly) from Calcutta take the old route (1862) from Mughal Sarai to Asansol [1] Passing Dildarnagar, 434 m. from Calcutta (branch, 11 m to Tari Ghat, on the opposite side of the Ganges to Ghazipur (p. 464) on the B N W Ry) the line before reaching Chausa (418 m from Calcutta), crosses the Karamnasa R. ("destroyer of merit"), which divides the United Provinces from Bihar (road bridge also) The water of this river, if it wets the feet of returning pilgrims, washes away the merit gained by bathing in the Ganges at Benares

411 m. from Calcutta, **Buxar** station (D B), famous for the great victory won on 23rd October 1764 by Major Hector Munro of H.M. 89th (Gordons) against Shah Alam, the Nawab Wazir of Oudh, Shuja-ud-daula, and the ex-Nawab of Bengal, Mir Kasim, a battle which, more important than Plassey, secured the English in Bengal The resistance offered to Munro was of the most stubborn character A crushing defeat was turned into an unexpected victory at the eleventh hour The losses of both parties were severe, 816 were killed and wounded on the English side, the enemy lost 165 guns, and their whole camp. The King Shah Alam then surrendered himself to British protection Buxar is also of interest as a place of pilgrimage. The great Rama (the hero of the *Rāmāyana*) is said to have crossed the Ganges here on his way to Mithila (Darbhanga District) to marry Sita, and to have killed a great demoness named Tarka

391 m **Raghunathpur**, about 3 m. from the stn is a temple of Siva, near which a very large cattle fair is held every year

369 m. from Calcutta, **Arrah** junction (D B) in Shahabad District Special interest centres round the defence of the "little house at Arrah" against the mutinous sepoys of Dinapore, threatening Havelock's advance [1] The garrison in June 1857 consisted of the 7th, 8th, and 40th Regiments of Bengal Infantry, one company of European, and one company of Indian Artillery, and H M 10th Foot On 26th July the sepoys mutinied and made off for Arrah, unpursued On the 29th, a body of three hundred and forty-three Europeans and seventy Sikhs was despatched to Arrah by

[1] On the journey from Bombay to Calcutta the Imperial Indian Mail train travels over the Grand Chord (see p 54).

[1] Sir George Trevelyan gave an account of the defence in his *Interludes in Verse and Prose*

steamer, under Captain Dunbar, but was compelled to fall back the next day after having been caught in an ambuscade For heroic conduct in this attempted relief the V C was conferred upon two volunteers of the Bengal Civil Service, Fraser M'Donell and Ross Mangles Private Dempsey, of the 10th, also won the same reward of valour by his brave conduct Meanwhile Major Vincent Eyre, of the Bengal Artillery, who had previously passed up the river to Buxar, had learned of the attack on Arrah, and on 30th July advanced with one hundred and sixty men of the 5th Fusiliers, and forty Artillerymen with three guns, to the relief of the place, which lay 48 m from him On the 1st August he had a severe engagement with the enemy at Bibiganj, 4 m to the W of Arrah town, which was decided by a resolute bayonet charge , and on the morning of the 3rd he effected the rescue of the Arrah garrison

The little house at Arrah, which had been prepared for defence by Vicars Boyle, engineer of the E I railway then under construction, had by that date been held for a week by twelve Englishmen, supported by fifty of Rattray's Sikhs, against a body of two thousand mutineers and a large mob The attack was commenced on 27th July, but the garrison, under the Magistrate - Collector Herwald Wake and Boyle, met the assailants with so heavy a fire that they speedily fell back. On the 28th and 29th the enemy subjected the house to a fire from two old guns, one of which was finally placed on the top of the larger adjoining house, fifty yards away. On the 30th an effort was made to smoke the defenders out, but this failed, and an attempt to mine the house was not carried to completion before the relief took place. Towards the end of the attack the provisions of the garrison began to fail, and they were obliged to sink a well 18 ft deep inside the house to provide themselves with water

The house, now in the compound of the Judge, declared an historical monument by Lord Curzon, is in shape nearly a square, and has two storeys, with a veranda on three sides, supported by arches, which the besieged filled up with sandbags The lower storey, which is little over 10 ft high, was held by the Sikh soldiers The diary which Wake wrote in pencil on the wall, has been obliterated by whitewash

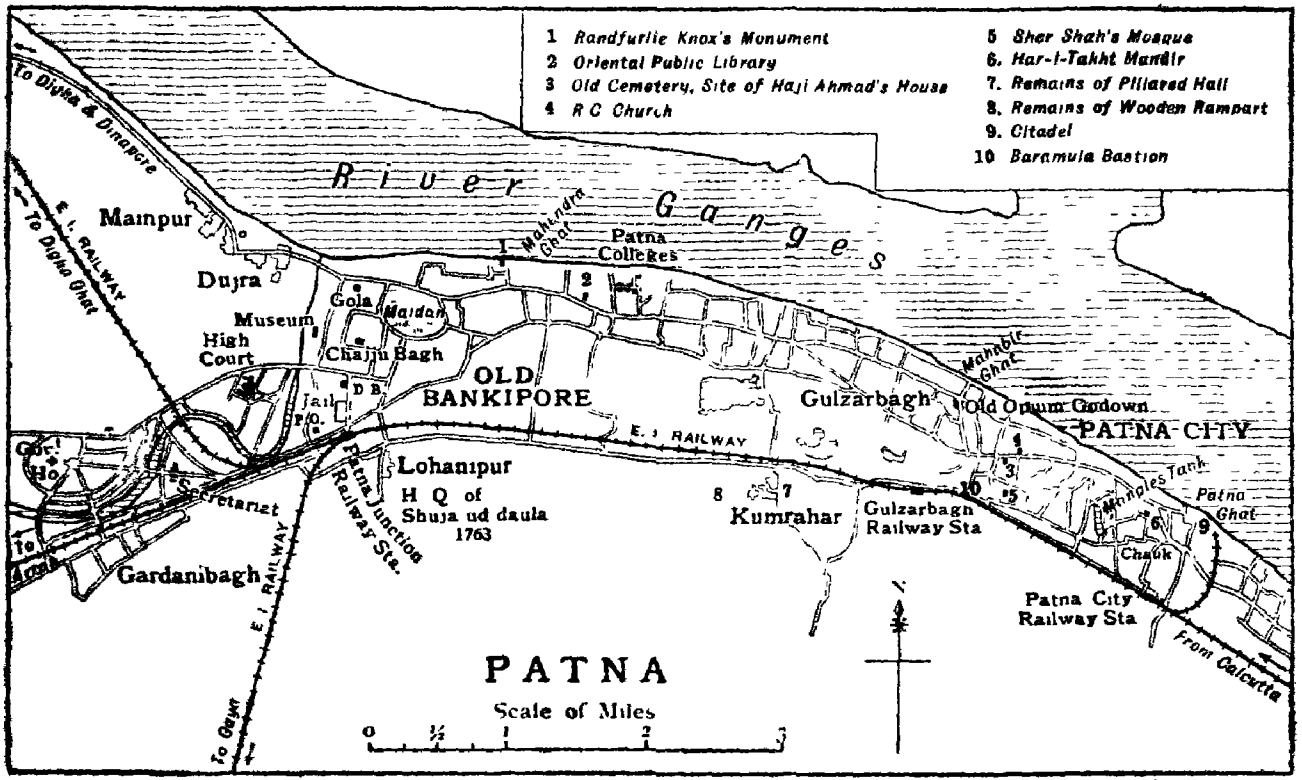
Arrah is on a branch of the *Son Canals*, the great irrigation work of South Bihar, the project of which was designed by Lt-Col C H Dickens, R A , and taken over by Government from the East India Irrigation and Canal Co in 1869

A N-G railway from Arrah to Sasaram connects the Main Line with the Grand Chord Line

360 m **Koilwar** The line crosses the Son River by a bridge of 28 spans of 150 ft (opened in 1862) There is a roadway for motors under the up-track At Maner, on the road to Dinapore, there is a perfect Muslim shrine (D B on the shore of a lake)

344 m from Calcutta, **Dinapore** Stn , 6 m. to Dinapore **Cantonment** (D B), which extends along the right bank of the Son

338 m from Calcutta, Patna junction* (R , D B , 12 rooms, close to the railway station), for **Patna New City** and **Bankipore**. New Patna, which stretches for 2 m. W. of Bankipore, is the H.Q of the Government of Bihar.



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The province (which then included Orissa) was constituted in 1912 under a Lieutenant-Governor, and the first Governor (Lord Sinha) was appointed in 1920 The present Governor, H E Jairamadas Daulatram, assumed office in 1947 The capital is well laid out, and is lighted with electricity. The principal buildings are the High Court (1916), the Council House (1920), the Secretariat, Museum (1929) and Government House A statue by Hampton of Lord Hardinge of Penshurst, in whose Viceroyalty the province was created, stands E of the High Court building in Hardinge Park The Chajju Bagh House, occupied by the Commissioner of Patna during the Mutiny, is the residence of the Chief Justice of the Patna High Court There are many beautiful gardens

Bankipore is the headquarters of the Patna district, and forms the western extremity of **Patna City** (station 6 m E, 175,706 inhabitants), which covers 10 sq m. and with its suburbs extends 9 m. along the S bank of the Ganges Round the Bankipore Maidan, a wide open space containing a race-course and golf-links, are large houses The Protestant Church (Christ Church) dates from 1857 Near the river-bank to the N. are the Collectorate, Judge's Court, Bihar National College, Prince of Wales Medical College and Hospital, Patna College (1837) Science and Training Colleges University Senate House, Law College, the Bihar College of Engineering and the Khuda Bakhsh Oriental Library

In the compound of the Judge's Court is a tall obelisk erected in memory of "the truly gallant Randfurlie Knox," who raised the siege of Patna by Shah Alam in 1760, after a memorable march of thirteen days from Burdwan, and died in 1764, after the city was captured by Major Adams in consequence of the massacre of prisoners by Mir Kasim

The **Oriental Library**, founded by Maulavi Khuda Bakhsh Khan Bahadur in 1900, is famous for its collection of rare Arabic and Persian MSS , it possesses the only volumes saved from the sack of the Moorish University of Cordova

The Gola, at the W corner of the Maidan, like a huge beehive, was built by John Garstin for a granary in 1786 "for the perpetual prevention of famine in these Provinces," but it has been used only temporarily It is 426 ft round at the base, built of brick, with walls 12 ft 2 in. in thickness, the interior diameter being 109 ft It is about 90 ft high, and might contain 137,000 tons Inside there is a most wonderful echo, the best place to hear which is in the middle of the building As a whispering gallery there is perhaps no better building in the world. The faintest whisper at one end is heard most distinctly at the other The ascent to the top is by steps outside Sir Jang Bahadur of Nepal rode a pony up the steps outside to the top

There is a Roman Catholic convent, St Joseph's, and the Bishop's Palace (Padre Ki Haveli), at Bankipore near the Civil Court Buildings, and St Michael's School, at Kurji, is at the fourth mile of the Bankipore-Dinapore road

3 m E of the Patna College is **Gulzarbagh** (stn. on main E.I.R line between Patna Junction and Patna City stns.), the quarter in which the Opium Factory and storehouses were situated Patna formed, with Ghazipur, the two agencies by which the Government monopoly of Bihar and Bengal opium used to be worked This opium has been famous from time almost immemorial, and was for

many years one of the principal sources of income of the E.I. Company Under the agreements with China in 1907 and 1911 for the abolition of the use of the drug in that country, the Patna opium agency has been abolished, and the Gulzarbagh Opium Factory was closed in 1911 The buildings, which are on the river-bank and are surrounded by a high wall, are now occupied by the Government Press and a map-drawing office They stand on the site of the old English Factory outside the W wall. The Dutch Factory, at Choupar and mentioned by Tavernier (1666), was ceded to the English in 1824

On high ground ¾ m W is the Duchess of Teck Hospital (built 1893-95), maintained by the Zenana Bible and Medical Mission and staffed by lady doctors and nurses

E of Gulzarbagh, on the main road, is the west gate of **Patna City** proper or Azimabad, as it is locally called, from the name conferred upon it in 1704 after the Subadar, Prince Azim-us-Shan. Near the Chauk is the **Har Mandir Takht** or Sikh temple, built by Ranjit Singh, which marks the birthplace (1660) of the tenth Guru Govind Singh In the temple, which forms one of the four sacred places of the Sikhs, are shown the Guru's cradle and shoes The small Sikh community which is settled here, is strictly orthodox, and will not eat of food unless it is cooked by a Sikh who carries all the five K's (kakkars) on his person, namely. the *Kesh*, or long hair, the *Kirpan*, or iron-handled knife, round which the hair is rolled, the *Kangha*, or wooden comb, the *Kachh*, or drawers, and the *Kara*, or iron wrist bangle

Half a mile W. is the old **Cemetery**, in a corner of which, by the City Dispensary, is an obelisk erected over the well in which the bodies were thrown of the sixty English captives[1] murdered at the instigation of Mir Kasim by Samru (p. 330) on 6th and 11th October 1763—a massacre avenged by the storm by Major Adams, H M. 84th Foot, a month later The Dispensary is believed to cover part of the site of the house in which the murder took place Opposite the cemetery is the **Roman Catholic Church** of the Blessed Virgin Mary, which was built in 1775, there are a number of old tombs in the graveyard Close by is a tank with a garden round it, known as Mangal Talao or the tank of pleasure, but in reality a corruption of the name of Mr Ross Mangles, V C (p. 61), the Collector who had it excavated in 1875 S of the main road is the Shikarpur quarter with a mosque built by the Emperor Sher Shah (1540-45). The Citadel was in the N.E corner

The ancient city of Pataliputra (the Palibothra of the Greeks) lies buried from Patna city to Dinapore It was the capital of Chandra Gupta (321-297 B C), Bindusara (297-274 B C), and Asoka (274-237 B C.), and extended 10 m. along the river and 2 m inland to the old bed of the Son Excavations in the hamlet of Kumrahar, S of the city, have disclosed the remains of a large pillared hall, which resembles the throne-room of Darius at Persepolis, and at Bulandi Bagh, ½ m. W. of Kumrahar, a wooden structure has been found which is thought to be a wooden rampart mentioned by Megasthenes To the N W of this site is Bhikna Pahari, an artificial hill about 40 ft. in height, which has been identified with the hermitage built by Asoka for his brother Mahendra, the apostle of Ceylon

[1] One of these, H Lushington, aged only 8½, who had already escaped from the Black Hole, slew three of his murderers before he was overpowered. A monument to his memory may be seen in the old Parish Church at Eastbourne.

Patna Jn. is the junction for the Digha Ghat Branch and the river crossing for the Bengal and N.W. Railway leading to Oudh; also for the Patna Gaya Railway, S. On the Gaya line is

7 m **Pūnpūn** station, on the banks of the river of that name The waters are supposed to wash away sins: and pilgrims halt here to bathe on their way to Gaya (p 55)

310 m from Calcutta, **Bakhtiyarpur** junction, N.-G railway to Bihar Sharif and Rajgir Kund, (33 m), also by road 6 m S W of Bihar is the village of Bargaon, the site of the great **Nalanda** monastery, founded by Kumar Guptà (427 A D), where Hiuen Tsang, the Chinese pilgrim (629-645 A D) resided for five years, and which was the home of 10,000 monks. Burmese, Japanese, and Jains have rest-houses Excavations started 1903, and there is a Museum (1917), also a Guide (1930) The Rajgir hills are filled with Buddhist and Jain remains A hermitage of the Buddha is at Gridhra Kuta Rajagriha was the capital of Bimbisara (Introd).

283 m. from Calcutta, **Mokameh** junction (R) Line to the N for Mokameh Ghat and Tirhut (p 463). To the E a loop-line (opened 1862) leaves the main line at (262 m.) **Lakhisarai** (Kiul) junction (the bridge is 1458 ft long), and runs along the banks of the Ganges *viâ* **Jamalpur** (branch to Monghyr), Bhagalpur, **Sahibganj**, and **Tinpahar** (see Route 23, p 461) to **Khana** (see below), where it rejoins the main line.

201 m. from Calcutta, **Jasidih** Jn., branch (4 m) to Baidyanathdham (Deogarh), whence motor service to Dumka, 41 m, also from Dumka to Rampur Hat, 39 m, on loop-line. Deogarh is a famous place of pilgrimage

183 m. from Calcutta, **Madhupur junction (R.)** for Giridih and the coalfield. The upland country at Simultala, Jasidih, Deogarh and Madhupur on this route is regarded by Bengalis as a sanatorium

138 m. from Calcutta, **Sitarampur**, junction with the Grand Chord line from Mughal Sarai (p 54).

(c) *Asansol to Calcutta (Howrah).*

132 m. from Calcutta is **Asansol** (D B.) junction station (R.) with the Bengal and Nagpur Railway (Route 7). The Grand Trunk Road from Delhi to Calcutta, commenced 1832, runs through The works of the Indian Iron and Steel Co are at Hirapur, the Indian Standard Wagon Works at Burapur

121 m. from Calcutta is **Raniganj** station (D B) on the E edge of the great coalfields of Bengal and Bihar, which stretch out 384 m to the W, and extend under the bed of the Damodar The place was formerly the property of the Maharaja Dhiraja of Burdwan. The railway reached this point in 1855, and it was still the railhead in 1857

That coal existed here was known as early as 1800 "The coal of Bengal is all derived from the rocks of the Gondwana system, and is of the Permian age, or rather younger than the coal of England." The area of the Raniganj field is not less than 500 sq m. It produced the largest outturn until 1905, but it has fallen behind the Jherria (Jharia) field, about 20 m. W of the Raniganj field, which possesses many thick seams at shallow depths These two fields, with the Giridih field, 30 m N W. of the Raniganj field, and the Bokaro-Ramgarh and Daltonganj areas, 10-30 m W. of the Jherria field, account for 90 per cent. of the coal raised in India. The

Parbelia colliery in the Raniganj field is 1500 ft deep. The Raniganj and Jherria coals are liable to spontaneous combustion, and the mines to flooding in the rains At Raniganj are Burn & Co.'s Potteries and the Bengal Paper Mills.

75 m. from Calcutta is **Khana** junction for the loop line (original main line) from Mokameh

67 m. from Calcutta is **Burdwan** station (R), D B, headquarters of a District assigned to the British in 1761, and residence of the Maharajadhiraja of Burdwan, the descendant of a Punjab Khatri, who settled at Burdwan soon after the place had been conquered by Prince Khurram, later the Emperor Shah Jahan, in 1624. The late Maharaja, Sir Bijay Chand Mahtab, G C I E, K C S I, I O M, was a member of the Bengal Executive Council from 1919 to 1924, and died 1941, the leading landholder in Bengal. Thara is a fine Palace Permission to view the extensive gardens and the collection of pictures, which includes a striking portrait by Chinnery, two historical paintings by Tilly Kettle, and several Indian landscapes by Daniell, can be obtained on application to the Superintendent

The "Star of India Arch," at the entrance to the town, was erected in commemoration of Lord Curzon's visit during his Viceroyalty. A bridge over the Damodar river connects with the Grand Trunk Road

38 m from Calcutta, **Pandua**, now only a small village, formerly the seat of a Hindu Raja and fortified by a wall and trench, 5 m in circumference, of which traces are still to be seen. A five-storeyed tower, visible from the railway, 120 ft. high, obviously built in imitation of the Kutb Minar at Delhi, is said to commemorate a victory of the Muslims over the Hindus in 1340: repaired in 1906-07 by Government, after an old lithograph A mosque has 27 domes standing out of the original 63

25 m from Calcutta is **Bandel**, junction for the E B Ry. to Naihati by the Jubilee Bridge (p 130) On the Barharwa-Bandel Railway (distances given from Bandel, the junction) is

26 m **Kalna**. A residence of the Maharaja of Burdwan, and formerly the port of Burdwan, on the River Bhagirathi or Upper Hooghly Inspection Bungalow.

65 m from Bandel, **Katwa**. At the junction of the Bhagirathi and Adjai Rivers Inspection Bungalow N.-G Ry 32 m to Burdwan

23 m from Calcutta, **Hooghly**. The railway to this point was the first section of the E I Ry and was opened in 1854. 21 m from Calcutta, **Chandernagore**, and 13 m from Calcutta, **Serampore** (p 127) stations 6 m. from Calcutta, **Bally** station From Bally Ghat to Dakhineswar, the Willingdon double-track bridge with roadway, built across the Hooghly river at a cost of 3 crores, connects to the Docks

1349 m from Bombay by the Grand Chord Route is **Howrah, Calcutta terminus**, on the west bank of the Hooghly river (Route 6)

ROUTE 8.

CAVES OF AJANTA

Jalgaon (p 41), 261 m from Bombay and 15 m from Bhusawal, by the G I.P Ry is the nearest main line railway station for the Ajanta Caves. Jalgaon is 34 m. by road from Fardapur in Hyderabad State, and the Caves are 3 m S W of Fardapur The caves are beyond question one of the most remarkable sights in India Sir John Marshall, ex-Director-General of Archæology, places them, with the stupas of Sanchi (p 162), amongst the noblest memorials of Buddhism in the country The tools used and method of lighting are matters for speculation Some of the long lines in the paintings were made in one sweep

A Guide-book and picture post-cards are available at the Curator's office (Cave 17) Applications to photograph or sketch should be addressed to the Director of Archæology at Hyderabad

Motor-cars can be obtained at Jalgaon by previous arrangement with the S M. (allow ten days), or direct from Nasarwanji & Co or Jalnawala & Sons, Aurangabad. The Archæological Department of H E H the Nizam's Government has fixed a rate for the trip to the caves and back from Jalgaon, which can be done in one day. There is a D B at Jalgaon and others at Pahur (a station on the Pachora Jamner branch of the G.I P Railway), 13 m from the caves Cars can be ordered to meet at Pahur, and there is a service of motor omnibuses Permission must be obtained from the Collector of East Khandesh, Jalgaon, to occupy these D B 's, but a stay is not necessary. There are two D B.'s and a State R H at Fardapur (permit from Director of Archæology, Hyderabad, Deccan), but Government officials have the first claim Catering is arranged by the Director at a daily rate all the year round.

The caves can be visited by car from Bhusawal and from Manmad Junction also (Route 4) The charge for cars (by arrangement with the firms at Aurangabad) is 4-6 annas a mile

The route from Manmad (60 m) passes through the old **town of Ajanta** (5 m S of the caves), which is surrounded by a strong wall and a deep moat, completed in 1727 by the first Nizam Ajanta Town is the place where Sir Arthur Wellesley halted after the battle of Assaye (23rd September 1803) A fine view can be had from the roof of the *baradari*, which was utilised as a hospital for the wounded

The caves can also be seen in one day from *Aurangabad (Route 4), another day being devoted to the Ellora Caves The Ajanta Caves are 60 m from Aurangabad

The **Caves of Ajanta**, unlike the majority of Buddhist caves, are excavated in amygdaloid trap rock in the scarped side of a deep ravine in the Indhyari hills, a crescent facing S E. A stream (Waghora) flows down the ravine and ends abruptly in a series of seven waterfalls (Sat Kund), of which the last makes a leap of 70 or 80 ft The view of the curved front of the caves from the inner entrance to the ravine, is extremely picturesque

The chapels and monasteries, discovered in 1819, date from about 200 B.C. to before the expulsion of Buddhism from India, *i.e.*, about A.D. 650. They were visited by Hiuen Tsang about 640 A.D. They are therefore entirely Buddhist.

Historically, says Mr Griffiths,[1] the twenty-nine caves are divisible into two main groups. Near the centre of the crescent are the five earliest (Hinayana), Nos. 13, 12, 10, 9 and 8, in point of age probably of the 2nd and 1st centuries B.C. The second group in order of age is made up of Nos. 11 (possibly an intrusion or modified later), 14, 15, 16, 17, 18, 19, and 20, the last probably dating A.D. 580. Nos. 6 and 7 may have preceded 19 and 20.

Nos. 1 to 5 on the E., and Nos. 21 to 29 on the W. of the crescent, may be referred approximately to the period between 500 and 650 A.D. Nos. 9, 10, 19, and 26 are chaityas or chapels, and the rest are vihara halls or monasteries.

On a short visit Nos. 1, 10, 17, 26 will be found representative.

The world-famous frescoes, which had suffered seriously from moisture and dirt and also from the injudicious application of varnish by copyists, are now in excellent condition. They were carefully cleaned, at the instance of H.E.H. the Nizam's Government, by two Italian experts, Prof. Lorenzo Cecconi and Count Orsini, in 1920-22, and their operations have been most successful. The caves are now electrically lighted, and will be illuminated at a fee of Rs. 5 a day.

The following description of the caves commences from the E. of the crescent[1] —

No. 1 (Mahayana) is a splendidly decorated vihara, dating from about A.D. 500. In the front is a veranda borne by six columns, once preceded by a porch borne by two. Outside the veranda are three excavations on each wing, and inside is one at each end. The hall, which measures nearly 64 ft. square, is borne by twenty columns enclosing a central space, and has five cells on either side. At the back an ante-chapel with two columns, flanked by two cells on either side, leads to a large shrine. All along the front of the cave is a sculptured architrave with spirited representations of elephants, hunting scenes, and groups of figures. On the W. chapel are representations of the four scenes of sickness, old age, and death, which led Buddha to renounce the world. In the upper part of the frieze are geese under a band of lions' heads. Three doors and two windows open into the hall from the veranda, the centre door being elaborately carved, as are the columns of the back row in the hall and the sides of the other rows which face inwards. These carvings deserve detailed notice, being among the richest and most ornate known. In the shrine is a colossal statue of Buddha, supported on either hand by Indra,

[1] *Paintings in the Buddhist Cave Temples of Ajanta*, by John Griffiths (2 folio vols. 1896-97), Principal of Bombay School of Art from 1872. Copies are exhibited at the Victoria and Albert Museum, South Kensington, but the best are in the Museum at Hyderabad.

[1] A magnificent series of photographs *in colour*, which have been taken on the spot by Mr E. L. Vasey, is in course of publication by the Oxford University Press, under the editorship of Mr G. Yazdani, the Director of Archæology at Hyderabad (4 Parts at £8, 8s. a part, two parts ready). See also the portfolio of copies made by Lady Herringham and her assistants, and published by the India Society in 1915. Major Gill (d. 1875) spent nearly twenty years (1844-63) in copying the principal frescoes in oils; many were destroyed by fire at the Crystal Palace on 30th December 1866.

Vedic deity of Rain At the sides of the doorway are statues of the goddesses of the Ganges and Jumna above, and of two snake-hooded guardians at the bottom.

The whole of the cave was once covered with paintings. In the four corners of the ceiling are interesting panels which represent groups of foreigners—perhaps Persians On the front wall is represented the reception of an embassy in Persian dress by a Raja in his palace, supposed to be the Chalukya Pulikesin II in 625-26 A D, from Khusru II On the back wall to the E of the antechamber is a mountain scene, and between the doors of the two cells are a Naga Raja and his wife in conversation with another personage, while high up on the wall is a snake-charming scene, farther on is another scene of a Naga Raja and ladies, and between the second and third cell doors, on the E. wall, is a scene of elephants and soldiers. On the back wall of the antechamber to the shrine is a painting of the Temptation of Buddha by Mara, such as is represented in the bas-relief in cave No 26 The best are those of the Boddhi satva Padmapani, and of a "black princess," on the back wall of the cave near the openings of the antechamber Note, on a pillar, four deer in different positions with one head

No 2 is a vihara hall, 48 ft square, supported by twelve pillars, with five cells on either side and one chapel room at each side of the antechamber and shrine There are also two chapel rooms at each end of the veranda, the front of which is carried by four pillars with flower-shaped capitals, the roof of the veranda projects 7 ft. to the front of the columns Access is given by a finely-decorated door, and two windows give light to side aisles formed by the columns in the hall, which are richly carved. At the end of these aisles are two chapel rooms, that on the E. side with the figures of a king and a queen holding a child, with small figures of sporting children below them, and that on the W. side with two large male figures. A richly-carved doorway leads to the shrine, in front of the seated figure in it are kneeling worshippers. Traces of painting exist in this cave on the roofs of the veranda and the hall and its aisles, and in the shrine and the two side chapels The scenes on the E wall of the hall represent a royal procession with elephants, horses, and armed retainers, and a sailing-boat laden with jars, "*Vidhura-pandita jataka*" On the wall on the left is a painting of the Birth of the Buddha

No. 3 has only a veranda

No 4 is the largest of all the viharas, measuring 89 ft square, and supported by twenty-eight pillars. It is surrounded by cells as usual, and has a large shrine, approached by an antechamber at the back The veranda was carried by eight octagonal columns, and has three doors and two windows in the back wall leading to the hall, the centre door being decorated with elaborate carvings Between it and the right window is a sculptured relief of the Buddhist Litany, in which two figures are represented in each compartment as fleeing to Buddha from danger, from fire, snakes, and wild beasts.

No. 5 has been commenced only, but has a handsome door at the back of the veranda

No 6 is the only cave here with two storeys The lower stage, of which the front has fallen, measures roughly 54 ft. square. It was borne by sixteen plain octagonal columns in four rows, but

only seven of these now stand. They are connected above by beams carved on the ceiling. On each side and at the back are cells, and in the middle of the last an antechamber with Elephanta-like columns leads to the shrine containing a seated figure of Buddha. The stair from this storey leads to the veranda of the upper storey, once carried by four columns, with chapels outside it and rooms at the end of it. The hall measures rather less than that of the lower storey, and is carried by twelve columns arranged round a central space. There are cells all round this hall also, and a shrine with a front chamber in the back wall. Some frescoes (discovered 1935) over the doors of the cells should not be missed.

The other (**No. 7**), a vihara of unusual design, has no hall, the veranda, preceded by two porches borne by columns of the Elephanta type, leads directly to four cells and to the antechamber to the shrine, both the last are profusely decorated with sculpture. The Buddha has his legs crossed, and his right hand raised to bless.

The Hinayana group commences with **No. 8**, a small vihara, measuring 32 ft. by 17ft by 10 ft. It had two cells at each side and two at the sides of the antechamber of the shrine. It is of the same age as the next.

The Chaitya Cave, **No. 9**, which is dated about 100 B.C., is 45 ft deep, 22¾ ft wide, and 23 ft high. In dimensions and in the decoration of its façade, except (later) figures of Buddha on either side of the entrance, it much resembles the Nasik Chaitya Cave (p 40), although rather older. Fourteen plain octagonal pillars on each side separate the nave and aisles, and eleven more continue the colonnade round the dagoba at the end of the cave. The vaulted roof once carried wooden ribs; in front of it is the great horseshoe window, 11½ ft high, with a terrace and rail in front of it, and a second terrace over the porch, with a guardian *dwarapala* at either end. The dagoba is 11 ft. high to the top of its capital, this is in the form of a relic-box, and probably once bore a wooden umbrella. Remains of paintings are still visible on the left and back walls, on each pillar were once painted representations of Buddha, and on the roof of the aisles was painted a pattern of wooden compartments.

No 10 is a (Hinayana) Chaitya dated 150 B.C., measuring 95 ft by 41 ft by 36 ft, and was also once fitted with wooden ribs, the roofs of the aisles having ribs carved in the stone. Its façade has fallen. The dagoba resembles that in No 9, and, as in that cave, there are remains of paintings. The costumes depicted in these resemble those on the S gateway of the great Stupa at Sanchi. Probably the oldest painting is the picture on the left wall of a king and queen and princess with women attendants watching the worship of the sacred Bodhi-tree (reproduced in *Ajanta*, Part III).

No 11 appears to have been remodelled, being a mixture of both styles. The roof of the veranda is painted with birds and flowers. The hall measures 37 ft. by 28 ft. by 10 ft., and is carried by four primitive columns. There is a bench along the right side. There are three cells on the left side, and two cells and a shrine in the end wall, in the shrine is a free-cut statue of seated Buddha, with a fine kneeling figure in front of it. On the left of the door are the remains of a painting of

a standing Buddha on a dark background

No. 12 is a vihara measuring 36 ft square, with four cells on each of the three inner sides The cells have two couches with stone pillars Over their doors the upper wall is ornamented with a horseshoe type of canopy

No. 13 is a small hall, 16½ ft by 13½ ft by 7 ft., with seven cells, each with a stone couch

This completes the group of Hinayana caves

Cave **No 14**, a vihara, is unfinished, it is reached above **No 13**, and forms the third of the middle group of Mahayana works No 15 has a hall 34 ft square without columns, preceded by a veranda (note the birds over the door) and with six cells on each side, in the back wall are two cells and a shrine The image of Buddha is carved out of the solid rock

No. 16 has a veranda 65 ft long and nearly 11 ft wide, borne by six plain octagonal pillars, from the front of it steps descend to a chamber with a representation of a Naga Raja A good view of the ravine can be obtained Three doors and two windows open from the veranda into the hall, which is nearly 66 ft square, and has twenty octagonal pillars, the roof of the front aisle being carved to simulate beams On each side are six cells The shrine, which is entered direct from the hall, and has side aisles separated off by two columns, contains in the centre a huge statue of Buddha in the teaching attitude. On the left wall of the hall is a beautiful painting of a dying princess, and others represent Buddha with a beggar's bowl, and teaching in a vihara. On the right wall, left of the door of the first cell, are the remains of a representation of Prince Siddhartha drawing the bow. A scene on the back walls, of elephants ridden by kings and escorted by musicians and soldiers, has been ruined by varnish

No. 17 is very similar in size and arrangement to No. 16, but has an antechamber to the shrine, and two cells on either side of the former Over the central door to the hall is a row of painted Buddhas There is one side door and three windows Between the veranda and No 16 is a fine cistern In front of the figure of Buddha in the shrine stand two figures, one with a mendicant's bowl, "Visvantra jataka" On the left of the door of the shrine is a painting of the return of Buddha after his enlightenment, and his reception by his wife and son On the ceiling of the N end of the veranda is a much-damaged circular painting, in the compartments of which human beings and animals are represented, and on the back wall of the E half is a painting of three females and a male figure flying through the air The paintings on the side walls of the hall have been ruined by smoke On the W portion of the back wall is a picture with scenes in a court of justice, and hunting, and others in which a lioness plays the principal part, "Sutasoma jataka." On the right wall is a scene supposed to represent the landing of Vijaya in Ceylon, and another of female demons devouring victims

No 19 is the third Chaitya cave, measuring 46 ft by 24 ft. by 24 ft high It is profusely decorated throughout Most of the court has fallen, but the porch at the back of the court under the great arched window still stands, and, like the whole façade, is covered with elaborate ornament Five pillars on each side of the nave separate the aisles from

it, and five more run round the dagoba. Outside the first two pillars of each colonnade is another, thus completing an aisle passage all round the cave. The columns have square bases and rounded shafts with bands of carving and bracket capitals richly decorated. Above the columns on the wall under the curved roof were painted multiple figures of Buddha, divided by floral arabesques. The roof has stone ribs carved under it. The front of the tall dagoba bears a figure of Buddha, and a triple umbrella reaches to the roof. Outside the cave to the W is a relief of a Naga Raja, with a seven-headed cobra hood, and his wife has a single hood.

No 20 has a veranda, of which the roof is carved in imitation of rafters, and a hall 28 ft by 25 ft, the antechamber here projects into the hall

The rest of the caves, from 21 to 29, complete the group of the later (600-650 A D) Mahayana caves, and lie considerably farther W.

The veranda of 21, which has fallen, had at each end a chapel with two pillars in front, with the earliest representation (as Dr Burgess believed) of the leaf falling over the corners of the capitals. The jewel or necklace pattern on the frieze above is characteristic of the work of the 7th century. The hall measures 51 ft. square, and has twelve columns, the image in the shrine is attended by huge *chauri* bearers. **No. 22** is a small vihara of 16 ft. square; the image in the sanctuary is represented with its feet resting on a lotus. **No. 23** is another vihara hall about 50 ft square, with twelve pillars; the sanctuary is incomplete, but all four columns of the veranda are entire.

No. 24, the largest vihara but never completed, shows how these caves were excavated by means of long galleries, which were broken into one another, the carving which exists is very elaborate. **No. 25** is a small vihara hall 26 ft. by 25 ft.; the veranda, which has two pillars, opened on a court in front

No 26, the fourth Chaitya cave, is 68 ft. deep, 36 ft wide, and 31 ft. high The veranda, borne by four columns, here also opened on to a court with sculptures on the sides of it, one on the east side representing the Buddhist Litany again. Over the veranda was a broad balcony in front of the great window, 9 ft. high; on each side of this are various sculptured reliefs of Buddha A colonnade of twenty-six pillars forms the aisles, and runs round the cylindrical dagoba at the back of the cave The frieze above the colonnade is richly sculptured, and the roof is decorated with stone ribs. The walls of the aisles are also profusely decorated with sculpture, on the left wall, near the door from the veranda, is a colossal image of the dead Buddha, Nirvana, and farther down the wall is the relief of the temptation of Buddha by Mara. The dagoba has representations of Buddha all round it, and is over 20 ft high

No 27, an unfinished vihara, would have been 42 ft wide and 31 ft. deep

No. 28, difficult of access, was intended to be a Chaitya, but only part of the great window has been excavated

No. 29 is inaccessible; only part of the veranda was ever completed

ROUTE 4.

Manmar to Daulatabad, the Caves of ELLORA, Aurangabad, Jalna, and Secunderabad

Manmar (Manmad), 162 m from Bombay —The metre-gauge (Godavery Valley) section of H E H. the Nizam's State Railway, has its terminus here (opened 1900) · connection with the Dhond-Manmar Chord of the G I P Rly There are waiting and refreshment rooms at the station.

63 m from Manmar is **Daulatabad** (*Deogiri*), in the Hyderabad State The railway passes near the S side of the 13th-century fortress, built on a huge isolated conical rock of granite, 2250 ft above sea-level, with a perpendicular scarp of from 80 ft to 120 ft all round A fine view of three sides of it can be had from the train. No permission to visit the Fort (1 m.) is necessary

On the E side of the Fort were two outer lines of defence, and beyond these stood the walled city, now in ruins, and crossed from S to N by the road to Rauza and Ellora On the left of the road stands the entrance to the outer line of defence, consisting of a hornwork with three gateways inside it, protected by a bastion 50 ft high Beyond the gate are (*r*) a Hindu temple with a lamp tower 13 ft high ; and (*l*) a small shrine of the Pir-i-kuds. On the latter side a little farther on are a large masonry tank, now dry, and a mosque converted out of a Jain temple, which has also served as a Hindu place of worship. Opposite these the Chand Minar or Pillar of Victory, a minaret of Persian form, rises 100 ft., it bears the date 1435 A D. The inner line of defence is passed by a gate similar to that in the outer line, the first gate in both cases being defended by iron spikes against battering by elephants ; and a steep flight of steps leads onwards to a third gate, giving access to a platform on the edge of the ditch, 40 ft wide On the right here is the *Chini Mahal*, with encaustic decoration, in which Abul Hasan Tana Shah, the last King of Golconda, spent thirteen years of imprisonment , close by on a bastion is a gun 21 ft. 10 in. long, called the Kila Shikan, or Fort Batterer The moat is crossed by a narrow stone bridge, at the end of which the road ascends to the Balakot by rock-cut chambers and passages, and emerges into the air 50 ft. higher up The opening was formerly covered with an iron shutter, 20 ft long and 1 in thick, made in ribs (part of it is gone), which in case of siege was heated red hot To provide ventilation for the fire a large hole has been tunnelled through the rock

Passing a gateway and the shrine of the Fakir Sukh Sultan, the path leads to a Baradari, or pavilion, from which there is a fine view It is believed to have been the residence of the Hindu Rani of Deogiri, and was a favourite resort of the Emperor Shah Jahan in 1636. The pavilion has a wide veranda, with a precipice of from 100 ft to 200 ft. in front, and a view to Aurangabad on the E and to Rauza on the N.

One hundred steps must be climbed to reach the citadel itself, on a platform 160 ft by 120 ft. At the W corner is a one-gun battery, 60 ft. by 30 ft The gun is 19 ft 6 in long, with a bore of 7 in On a bastion is another large gun, on which is a Gujarati inscription, saying that the funds for its construction were provided by certain Banias, and also a Persian inscription, naming the gun " Creator of Storms " Tavernier wrote that the gun on the highest platform was raised to its place under the

directions of a European artillery-man in the service of the Great Mughal, who was promised leave to return to his native land if he succeeded

Deogiri was the capital of the Yadava dynasty after the fall of the Western Chalukyas In the year 1293 Ala-ud-din, afterwards King of Delhi, took the city The citadel still held out, and he finally raised the siege on receiving a ransom of 15,000 lb of pure gold, 175 lb of pearls, 50 lb of diamonds, and 25,000 lb of silver Twenty-five years later (1318) the Yadava Rajas were exterminated by Qutb-ud-din Mubarak Shah In 1338 A.D Muhammad Shah Tughlaq removed the inhabitants of Delhi here, and changed the name to Daulatabad, but his attempt to establish his capital in the Deccan ended in complete failure Seventeen years later the exiles were permitted to return to Delhi Shah Jahan took it in 1630 from the last Nizam Shahi King

Daulatabad is the nearest station for the caves of Ellora. On receipt of telegraphic advice the Station-master will arrange for the supply of conveyances by Messrs Nasserwanji, or Jalanwala, Aurangabad (p 82), but the trip is better made from Aurangabad, Permission to stay at the R H at Rauza (Khuldabad) must be obtained from the Political Secretary, H E.H the Nizam's Government, Hyderabad, in advance There is a Local Fund bungalow at Khuldabad. Field glasses should be taken

The road from Daulatabad to Rauza (8 m) ascends the Pipal Ghat, paved by one of Aurangzeb's courtiers, as recorded on two pillars about half-way up the hill.

Rauza or Khuldabad ("The Heavenly Abode") is a walled town, 2000 ft. above the sea, and is 2 m from the caves of Ellora It is the *Karbala* (holy shrine) of the Deccan Muslims, and the burial-place of the Emperor Aurangzeb, of his second son, Azam Shah, Asaf Jah, the founder of the Hyderabad dynasty, who died in 1748 at Burhanpur (p. 42), Nasir Jang, his second son, murdered (1750) near Gingee, Malik Ambar, the powerful Abyssinian Minister of the last of the Nizam Shahi Kings, Abul Hasan Tana Shah, the imprisoned King of Golconda, and minor celebrities

Rauza once contained a considerable population, and is surrounded by a high stone wall (built by Aurangzeb) with battlements and loopholes Old and ruinous mosques and tombs abound in every direction on each side of the road

Midway between the N and S gates of the city is the grave of Aurangzeb in the Dargah of Saiyad Zain-ud-din, on the right side of the road An ascent of 30 yds leads to a domed porch and gate way. Some of the surrounding buildings are used as rest-houses for travellers, and one as a school In the centre of the S. side is an exquisite little Nakkar Khana, or music hall, from the galleries of which music is played The W side is occupied by a large mosque, the roof of which is supported on scalloped arches Facing the N end of the mosque is a small open gateway leading into an inner courtyard, in the S E angle of which is the door of Aurangzeb's tomb Above the door is a semi-circular screen of marble.

The grave is on a marble platform, and is open to sun and rain, as it should be according to orthodox Muslim ideas. Aurangzeb, who was a man of austere piety, is said before his death to have desired that his

sepulchre should be poor and unpretentious, in accordance with the tenets of the Koran, and to have expressly "desired in his will that his funeral expenses should be defrayed from the proceeds of caps which he had quilted and sold, an amount that did not exceed Rs 10, and that the proceeds of the sale of his copies of the Koran, Rs.805, should be distributed to the poor" H E H the Nizam has erected a marble screen around the tomb

Fifteen or twenty paces to the E of Aurangzeb's tomb is a small quadrangular enclosure of marble, within which are three graves, the one on the right being that of the daughter of Saiyad Zain-ud-din, the Muhammadan saint buried close by, the next, that of Azam Shah, Aurangzeb's second son, attached to which is a small marble headstone carved with floral devices, and the one beyond, the grave of Azam Shah's wife The whole is surrounded by a plain screen of white marble Between these tombs and that of Aurangzeb is the mausoleum of Saiyad Zain-ud-din, on the E side of which are inscribed a number of verses from the Koran and the date of the Saiyad's death, 1370 A D This tomb, however, was erected many years after that period by one of his disciples The doors of the shrine are inlaid with silver plates of some thickness: the steps below it are embellished with a number of curiously cut and polished stones, said to have been brought here from time to time by Fakirs and other religious devotees of the shrine. A little distance to the rear of this tomb is a small room built in an angle of the courtyard wall, which is said to contain a robe of the Prophet Muhammad. It is carefully preserved under lock and key, and is only exhibited to the gaze of the faithful once a year —on the 12th Rabi-ul-awwal

Opposite this Dargah, on the left side of the road, is that of Hazrat Saiyad Burhan-ud-din, with the grave of Nizam-ul-mulk Asaf Jah, the first of the Nizams of Hyderabad. The entrance is through a large quadrangle, having open-fronted buildings on all sides, and a Nakkar Khana (music gallery) at the E. end The W end is used as a school for instruction in the Koran A door at this end gives access to an inner courtyard in which are a number of graves Facing the entrance are the tombs of Asaf Jah and Nasir Jang, his second son, surrounded by a lattice screen of red sandstone, and that of Hazrat Saiyad Burhan-ud-din, a saint who died at Rauza in 1344 A D

He was the successor of Muntajib-ud-din, sent by Nizam-ud-din Aulia (p 304) from Upper India with 700 disciples a few years before the first invasion of the Deccan by Ala-ud-din (1294), and was succeeded by Zain-ud-din. Deposited within the shrine are some hairs of the Prophet's beard, which are said to increase yearly in number The shrine, however, boasts of a still more remarkable treasure On the pavement to the S of the building, small lumps of silver are shown. These are supposed to be the remains of trees of solid silver, which grew miraculously after the saint's death and were broken up and sold for the maintenance of the shrine Subsequently, a small jagir was allotted to the disciples of the Saiyad, and since that time only a few buds of silver appear at night. The doors of the shrine are covered with plates of white and yellow metal wrought into designs of trees and flowers

THE CAVES OF ELLORA

are 19 m. from Aurangabad.* A motor road to the entrance was made in 1925, on the occasion of the visit of Lord and Lady Reading.

This group of **Cave Temples** in the Deccan trap rock comprises twelve Buddhist, seventeen Brahman, and five Jain works The road down the Ellora Ghat passes the south side of the Kailasa Temple, and divides the caves into two groups, twenty to the left and fourteen to the right of it The Buddhist caves lie at the S end and the Jain caves at the N end of the hill, facing W. and nearly 1½ m long, the Brahman caves and Kailasa being situated between the two groups

A Curator of the Hyderabad State Archæological Department attends the visitors. Besides the D.B., which is available for the use of visitors, there is a State guest-house which may be occupied by leave of the Political Secretary of H.E.H. the Nizam's Government at Hyderabad Application for permission to photograph or sketch the interior of the caves must be made to the Director of Archæology, Hyderabad. The Archæological Department has published a reproduction, in pamphlet form, of Dr Burgess's detailed account, which can be obtained (Rs 2) at the caves, with picture postcards

"Architecturally," wrote Fergusson,[1] "the Ellora caves differ from those of Ajanta, in consequence of their being excavated in the sloping sides of a hill and not in a nearly perpendicular cliff. From this formation of the ground almost all the caves at Ellora have courtyards in front of them. Frequently also an outer wall of rock with an entrance through it is left standing." They are mentioned by Masudi, the Arab geographer of the 10th century, as a celebrated place of pilgrimage; and Thevenot, who visited them about 1667, has left an interesting description.

Representative caves are:—10 and 12 (Buddhist), 14 and 15 (Brahman), 33 (Jain).

Buddhist Caves.—These are to the S of the Ghat road, beyond three Brahman caves. The farthest group at the S end is named the Dherwara or Outcastes' quarter, dating from 350 to 550 A D

No 1 is a vihara (monastery), measuring 41½ ft. by 42½ ft., and having eight cells round it. No 2, which was a hall for worship, is approached by a flight of steps, and is reached through a veranda carved with figures and having large *dwarapalas* (guardians) at the door of the cave, which is flanked by a window on either side The interior, 48 ft square, flat-roofed, has a lateral gallery on each side; the roof is supported by twelve columns arranged in a square, with high bases and cushion capitals, and the two galleries have four pillars in front of them—all richly decorated. A shrine, with huge *dwarapalas* and a seated Buddha 11 ft. high in the centre of it with two standing Buddhas on either hand, occupies the middle of the back wall, and on each side of the shrine is a double cell elaborately carved. No. 3 was a vihara, measuring 46 ft square, and having twelve cells round it; the twelve columns which support it have a drooping leaf or ear over their circular necks. In the N. end

[1] *Indian Architecture* See also the chapter in *L'Inde sans les Anglais*, by Pierre Loti (1903), entitled "Les Grottes Epouvantables."

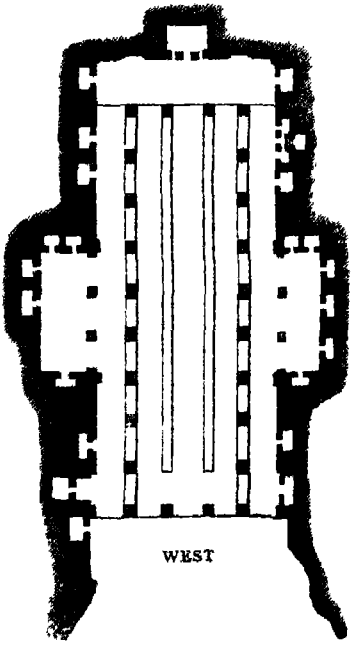
of the veranda is a chapel with a Buddha seated on a lotus supported by snake-hooded figures, and on the right of this is a pictorial litany. **No. 4** is a much-raised vihara, now measuring 35 ft by 39 ft. deep. At the inner end is a cross aisle, beyond which a shrine, with a statue of Buddha under the Bo-tree, and two cells were excavated; the columns are similar to those in No. 2. **No 5**, known as the Maharwada, and formerly as the Dherwara cave, is again reached by steps. It is the largest single-storeyed vihara cave here, measuring 58½ ft. by 117 ft. deep. The roof is carried by two rows of ten columns, similar to those in No. 2, with two more between them at each end, and two stone benches run down the cave parallel to the ranges of pillars. On either side of the cave is a recess with two pillars and a number of cells, and at the end is a shrine. From its arrangement it appears that this cave was a hall of assembly or refectory. **No 6**, to the N. of No 5, is reached through a lower hall with three cells on the E. side, it measures 26½ ft. by 43 ft., and has an antechamber and shrine at the back of it, the former richly carved, and the latter containing a large seated Buddha. The figure on a stone at the foot of the goddess Saraswati on the S. wall of the antechamber deserves notice. Beyond it is yet a third hall, measuring 27 ft. by 29 ft., with three cells on the E. and N. sides. **No 9** lies in the N.W. angle beyond the third hall, and is reached from the central hall of No 6, it has a well-carved façade. **No 7**, to which the stairs in the first hall of No. 6 lead, is a large vihara, 51½ ft. by 43½ ft., supported by four columns only. **No. 8** is entered from this, and is a hall measuring 28 ft. by 25 ft., with three cells on the North side, a shrine with a passage round it, and a seated image of Buddha in it, and a smaller hall on the W. side. On the face of the rock by this is a group of the child Buddha with his mother and father.

No. 10 is the only chaitya or chapel cave of the group, and lies some way to the N. It is known as the Viswakarma or Carpenter's cave. Fergusson took 600 A.D. as the date for the Viswakarma and surroundings, and 750 A.D. as the time when Buddhism began to wane in W. India, but it is not earlier than 700 A.D. In front of it is a large court, which is reached by steps, and from which a second flight of steps leads to the veranda. The galleries round the court are borne by elegant pillars, and at the foot of each of these was a fine stone lion facing outwards. At the back of the side galleries are two chapels elaborately carved, and at the ends of the back gallery or veranda are two chapels and two cells. The fine railed terrace above the veranda is reached by a flight of steps in the N. gallery. The façade is surmounted by a bold projecting cornice cut in the rock, and the great horseshoe window is here divided into lights. The interior measures 86 ft. by 43 ft. by 34 ft., and the nave and aisles, which run round the dagoba, are separated by twenty-eight columns. The dagoba is 27 ft. high, and has a colossal seated Buddha in the front of it. The roof is carved in imitation of ribs, and the projecting wall under it and the above columns is carved with two rows of panels, the upper with Buddha and the lower with ganas or dwarfs.

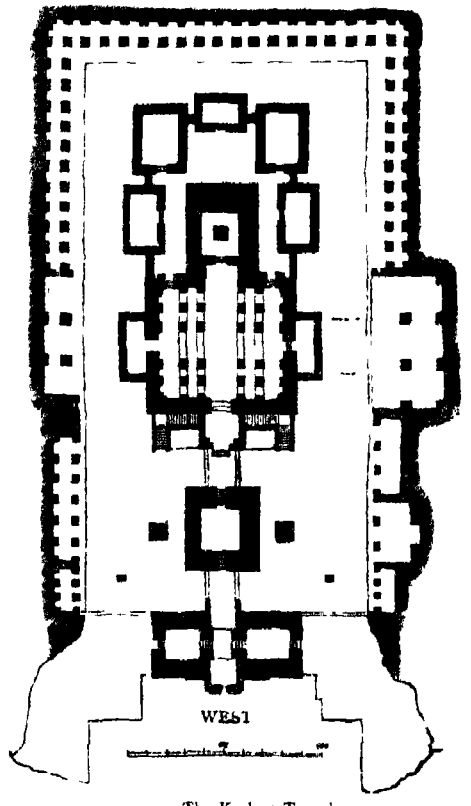
The Do Thal[1] cave (**No. 11**) was discovered in 1876 to have three storeys; it also is preceded by a court. The lowest storey consists of a veranda only, with a shrine and two cells at the back of it. The middle storey has eight pillars in front and five

[1] Do Thal = Two storeys

chapels or cells, of which only the three richly-carved ones in the middle are completed. The centre chapel is a small hall with two pillars and a statue of Buddha with a seated statue of Buddha on either wall. The shrine contains a colossal seated Buddha and a number of other figures. On the walls of the front hall a relief of Buddha with attendants and *chaun* bearers is repeated in many places.



The Maharwada or Dherwara Cave



The Kailasa Temple

The Tin Thal[1] cave (No 12) dates probably from about 700 A D. This again has a fine forecourt, but in this instance without side galleries. Steps lead from the court into a great hall, 115 ft. by 43 ft., with three rows of columns; beyond this a second hall, 42 ft. by 35 ft., borne by six columns, extends up to the shrine.

Steps at the S W corner of the front hall lead to the middle storey, borne by two rows of eight pillars. The shrine is elaborately carved, and two fine *dwarapalas* guard the door. The topmost floor is carried by five rows of eight columns, the hall measuring 115 ft by 70 ft. Along both side walls are large figures of Buddha seated on a throne, and on the back wall

[1] Tin Thal = Three storeys

are the seven human Buddhas, seated under trees at the one side and under umbrellas at the other The antechamber, which is very large and has two pillars, is sculptured all round with large figures, in the shrine is a very large squat Buddha. The sculptures are almost Brahmanical

Brahman Caves—Fifty yds N of the Tin Thal cave begins the group of sixteen Brahmanical caves, or seventeen including the Temple of Kailasa The first of these is a plain room only, next comes the Ravan ka khai,[1] and then the Das Avatára, between which and the Kailasa temple there is a footpath All these were probably constructed in the 7th and early part of the 8th centuries A D, the temple being the latest in date

The **Ravan ka khai (No 14)** presents a different arrangement from any Buddhist cave At the entrance were four columns making a front aisle, behind, twelve columns enclose the central space of the hall, and beyond these is a shrine standing free at the end of the hall The pillared portion measures nearly 55 ft sq, and the depth of the cave to the back wall behind the shrine chapel is 85 ft The S wall bears Saiva sculptures of the slaughter of the buffalo demon, Siva and Parvati playing chess, and Siva dancing the tandava (a dance of exultation at his victory over the demon Mahisa), Ravana shaking Kailasa and Bhairava,[2] while the N wall has Vaishnava representations of Durga, Lakshmi, wife of Vishnu, the Varahani, or boar incarnation of Vishnu, a four-armed Vishnu, and Vishnu seated with Lakshmi Inside the shrine is an altar and a broken figure of Durga, in the passage outside it on the S side is a group of three skeleton demon gods, Ganesh and the seven great goddesses, each with a child, and her cognisance below—viz, Chamundi[1] and owl, Indrani and elephant, Varahani and boar, Lakshmi and Garuda eagle, Kaumari and peacock, Maheswári and buffalo, Bráhmi and *hans* or goose

The **Dás Avatara**[2] cave **(No 15)** is reached by a considerable flight of steps at the end of a large court hewn in the rock, which in this instance has a chapel in the middle of it and smaller shrines and cisterns round it, inside the chapel are four columns on a platform which perhaps once had an image of a bull (nandi) on it The cave has two storeys, of which the lower is carried by two rows of eight plain pillars, two more standing between four cells in the back wall. Above the lintel of the doorway is an unfinished inscription. From the N W corner of the cave a staircase leads first to a landing with eleven reliefs of Hindu gods, beginning with Ganesh and ending with Durga, and then to the upper storey, which measures 95 ft by 109 ft deep, and is supported by seven rows of six columns, those in the front row being richly carved The sculptured scenes on the walls are mainly similar to those in the preceding cave, among other noticeable scenes are Bhairava with a necklace of skulls and the marriage of Siva and Parvati on the N wall, Siva springing from a lingam and Lakshmi with elephants pouring water over her on the back wall; and Vishnu, resting on the five-hooded serpent, and incarnated as a dwarf and as Narsingh (man-lion), on the S wall In the shrine, behind an antechamber with two

[1] Ravan ka khai = Excavation of Ravana
[2] See p 78

[1] The name of this goddess, a specially ferocious form of Durga, is derived from the two giants Chanda and Munda, whom she slew She wore an elephant hide and a necklace of corpses, and used to rejoice in human sacrifices. See play of Malati and Madhava in Wilson's *Theatre of the Hindus*
[2] Dás Avatara = Ten Incarnations

columns, was a lingam or emblem of Siva.[1]

The **Kailasa Temple**, dedicated to Siva, is certainly the noblest Hindu memorial of ancient India. It is attributed to a Rashtrakuta King Dantidurga (725-755 A D), and is carved out of rock left *in situ*. Some 200,000 tons must have been excavated The back wall of the pit is over 100 ft high, and the court itself is 276 ft. long and 154 ft broad A rock screen, pierced by a fine entrance passage, stands on the W. side, near it are two gigantic stone elephants. Between the screen and the temple, and connected with both, is a nandi (bull) shrine, 26 ft square and two storeys high, with a stone flagstaff on either side, and beyond this is the temple, measuring 164 ft from front to back and 109 ft from outside to outside of the side porches, and rising 96 ft above the floor of the court It consists of three parts—a porch (in the ceiling of which are traces of painting), a central hall measuring 57 ft by 55 ft, and borne by sixteen massive square columns arranged in four groups of four each, with broad aisles between, from W to E and from N to S., and a dark shrine, 15 ft square inside, with the Ganges and Jumna as guardians at the door. A passage leads all round the shrine and to five chapels placed at the sides and back of it, these illustrate the shape of the cells on the terraces of structural Buddhist viharas. The solid basement on which the temple stands is carved with a splendid series of immense elephants and monsters projected from the wall, and forms quite one of the finest remains of antiquity in the whole of India At the sides of the bridge connecting the porch and nandi chapel, and of the staircases leading to the former, are large sculptures and reliefs, the latter representing scenes from the *Ramayana*. On the S side of the court opposite the porch is a rock-cut gallery, borne by two columns, with statues of the seven great goddesses and Ganesh E. of this is a plain cave, 55 ft by 34 ft., borne by four pillars, and with a veranda, also with two columns There is also an upper storey to this cave, once connected with the temple by a flying bridge, under which, on the temple wall, is a relief of Ravana shaking Kailasa From this point the E half of the court round to the N side porch of the temple is encircled by a corridor cut in the rock, with twelve large compartments of sculpture on the S side, nineteen on the E, and twelve again on the N, representing various Saiva and Vaishnava scenes The view of the temple from under the great cliff at the E. end is extremely impressive

W. of the N corridor is another, but plain, one, under the large Lankeswar cave This is 108 ft. by 60 ft, exclusive of a nandi chapel in front of it, and is reached by a dark winding staircase from yet a fifth corridor W of the fourth. The cave is borne by sixteen pillars arranged as in the Kailasa temple, and by two rows of five and four more columns on the outer edge of the S. and W. sides, two in front of the shrine completing the whole number of twenty-seven; between the columns of the outer lines is a sculptured rail,

[1] A Thug confessed to Col Meadows Taylor that the caves at Ellora contained all the mysteries of his profession, and that every particular of the murderous methods of Thagi (Thuggee) was depicted on the walls, from the marking down of the victim to the burial of the body in a hidden grave For an account of the proceedings of this hereditary guild of assassins who justified their strangling of human beings as a sacrifice to the goddess Kali (Bhowani, Durga), Meadows Taylor's *Confessions of a Thug* (Oxford Univ Press) should be read. Active operations against this criminal fraternity were begun by Sir William Sleeman and others in 1829, but it was not until 1861 that most of the gangs were dispersed.

and in the back aisle of the cave are a number of large sculptured scenes. At the sides of the door to the shrine are female guardians, the altar inside has been broken In the N.W. corner of the court is a small cave shrine with two pillars in the front decorated with representations of the three river goddesses of the Ganges, Jumna, and Saraswati; and above this is a small unfinished excavation

A footpath near the N side of Kailasa leads up to the plateau past a cave with a Trimurti, or Triad figure of Siva, in it (p 27) Farther N are four unimportant Brahman caves, beyond which the **Rameswara** cave (No 21) is reached This is a Saiva temple, once with a porch in front of it, borne by three rows of four pillars very varied in design, it has a few carved scenes A corridor formerly ran round three sides of the forecourt The next important cave is known as the **Nilkantha** (No. 22), it has a small ruined chapel in the forecourt, from which thirteen steps lead into the cave, measuring 70 ft by 44 ft In the shrine is a lingam The **Khumbarwada** cave (No 25), 95 ft by 27 ft, including the smaller hall at the back, has a figure of the sun god in his seven-horse chariot in the vestibule to the shrine The next temple is a large hall with several chapels, measuring 112 ft by 67 ft., and supported by columns of the Elephanta type, at the door of the shrine are very large *dwarapalas*. The path now reaches a fine ravine, over the scarped head of which a waterfall descends after rain. On the S side of this is the Vaishnava, Milkmaid's, or **Gopi** cave (No. 27), and on the N. side the cave (No 29) named **Sitaki Nahani** (or bath) The veranda of No 27 is ruined, but on the back wall of it, pierced by a door and four windows, are various carved scenes, the inner hall measures 53 ft. by 22 ft. No. 29 will remind every one of the great cave at Elephanta, of much the same period, 650-725 A.D. It consists of a principal hall, facing nearly W, with a recess on the S. side opening on to the ravine, and a larger recess of irregular shape on the N. side. The central hall measures 149 ft in depth and 95 ft. in breadth, including the two side aisles, which lead to the recesses, and is borne by four rows of four columns, the two eastward of the middle rows being merged in the walls of the free shrine, while two more stand at the W. end of these rows and correspond with those at the sides of the entrance The steps to this are guarded by two lions, and in front of them is a circular platform for a nandi In the veranda and front aisles of the cave are carved reliefs much as at Elephanta The shrine is a small square room, approached by four doors as in that cave, and contains a lingam From the S recess steps descend to the ravine, of which a charming view is obtained at this point The N. recess is also reached by steps guarded by lions, a small low cave exists at the E end of this, and from the S W corner of the recess a passage has been broken into an excavation with six pillars, there is usually water in this wing, which prevents close examination, but keeps it cool.

Jain Caves.—The five Jain caves dating from the 8th to the 13th century, lie beyond the Brahman caves, the first being the **Chhota Kailasa** (No. 31), some way up the face of the hill. This temple is in a pit measuring 130 ft. by 80 ft., and has a hall 36 ft. square, borne by sixteen columns, and a shrine 14½ ft by 11½ ft It was imitated from the great Kailasa temple, and left incomplete

The **Indra Sabha** (No. 32), believed

to be the earliest, is entered through a rock screen facing S, in front of which, to the E., is a temple with nude statues of Parasnath, Gomata Swami with creepers round his limbs, and the last Tirthankar, Mahavira In the S E corner of the court is a large elephant, and opposite it was a monolithic column, in front of a cave with six columns, containing reliefs of the same three Tirthankars In the centre of the front of the court is a chapel with a quadruple image of a Jain saint; at the back of the court is an incomplete hall borne by twelve columns, with two more between the S and N colonnades and the veranda and shrine Over this, reached by a staircase in the veranda, is a second hall with wings to the front of it, each with a small temple borne by four columns The hall, measuring 55 ft. by 65 ft, is supported by twelve pillars, in the centre of which was once an image; the walls all round are divided into compartments filled with Jain saints, and the shrine has a statue of Mahavira The figures at the ends of the veranda are noticeable, also the cornice round the shrine and a door

The **Jagannath Sabha**, portion of No. 33, is also a double cave with a court in front. On the W. wing of this is a small hall, and at the side of the main cave is a small chapel The cave is supported by four columns in front and by four more inside, the sculptures in it are in an unusually perfect condition The outside staircase to the upper storey leads to another hall, 57 ft by 45 ft, the ceiling of which was once painted in concentric circles, and the walls of which are sculptured with figures of Mahavira and Parasnath This cave connects internally with the Indra Sabha, and also with another to the W of it consisting of a veranda with two columns and a small hall with four. On the top of the hill in which the Jain caves are excavated is a rock-hewn statue of Parasnath 16 ft high, protected by a structural building raised over it some 200 years ago

71 m ***Aurangabad** (Railway Hotel), in the Nizam's Dominions, has a considerable trade It was first called Khadke, and was founded in 1610 by Malik Ambar, the head of the Abyssinian faction in the Ahmadnagar State The town lies to the E of the former Cantonment (1817)

The **Pan Chakki**, or water-mill, the shrine of Baba Shah Muzaffar, a *Chishti* (p 218) and spiritual preceptor of Aurangzeb, is situated on the right of the road from the Cantonment to the Begampura bridge, and on the very edge of the Kham, the river of Aurangabad In the garden is a brimming tank of clear water, full of *Kohl* fish up to 3 ft long

This overflows into a lower one, and that again into a narrow conduit Beyond the first tank and the ornamental garden is a second and much larger tank It is entirely supported on vaults, with two rows of massive pillars Below is a noble hall, reached by steep steps, down to the level of the river. On the right of the second tank is a fine mosque, the roof of which is supported by four rows of massive pillars In two of the rows the pillars are of teak, and in two of masonry At the S W corner of this mosque, in a little garden, is the diminutive Tomb of the saint, of beautiful light-coloured marble.

¼ m N from the *Pan Chakki* is the *Mecca Gate* of the city and the *Mecca Bridge*, which are probably early 17th century The top of the parapet of the gateway is 42 ft above the road. Flanking towers are surmounted by domes. Inside the gate there is a black stone mosque built by Malik Am-

bar. In the centre is a niche with the Divine Name and "Victory is near." Above that is the *Kalima* and some verses of the Koran written in difficult Tughra. Close by is a recess with a bell-shaped ornament. This is perhaps the oldest mosque in the city.

The **Government Offices** are 2 m. to the S.E. of the Cantonment, and in or near the *Arsla Arh* or citadel, built by Aurangzeb. This spot, the site of gentlemen's houses in the reign of Aurangzeb, not long ago was entirely covered with cactus and jungle, the haunt of hyenas and other wild animals. Sir Salar Jang, while Minister, had the site cleared, and numerous reservoirs, fountains, and other works of interest were discovered. These have been repaired, and the wilderness has literally been changed into a garden. Only one archway of Aurangzeb's citadel remains, but here fifty-three great Princes, such as the Maharajas of Jaipur and Jodhpur, attended the court of the Emperor with thousands of armed retainers, and Aurangabad was then the Delhi of the South. As soon as Aurangzeb died the Princes departed, and Aurangabad sank at once into comparative insignificance.

The Jami Masjid is in a grove. One immense *Ficus Indica* (banyan) stands close to the road, and shades some 300 ft. of it. The Mosque and minarets are low, but the façade is rendered striking by an ornamental band of carving 2 ft. broad along the whole front. Over the central niche are the *Kalima* and inscriptions in Tughra writing, as in Malik Ambar's Mosque. A net (not seen anywhere else) covers the entire façade, so that no birds or bats can enter. Malik Ambar built half and Aurangzeb the other half.

1 m. N.E. of the town is the **Mausoleum** of **Rabi'a Daurani**,[1] wife of Aurangzeb. The great door at the gateway is plated with brass, and along the edge is written, "This door of the noble mausoleum was made in 1089 A.H., when Ataullah was chief architect, by Haibat Rai." Near the inscription there is an infinitesimally small figure, said to be a bird, indistinctly carved. It is a common local joke to ask a man, who asserts that he has been to this mausoleum, if he saw the bird there, and if he answers in the negative, to dispute his having seen the mausoleum at all. The curious roof of the gateway of the mausoleum should be observed. In the garden is a long narrow basin of water, in which fountains used to play, and on either side of the water is a walk and ornamental wall.

The building is a replica of the Taj Mahal at Agra. In the wall of the mausoleum is a small door, only 6 ft. high, plated with brass, where a second "bird" is pointed out on the edge close to the upper central knob. The carving of the flowers on this door is curious, and that of the dragons particularly so. Those who wish to enter the tomb are expected to take off their shoes. The cenotaph is enclosed in an octagonal screen of white marble lattice-work exquisitely carved, and stands on a raised marble platform.[2] The place for the slab is empty, and nothing but earth appears. This is much approved by Moslems, as showing humility. In the gallery above the tomb is a marble door exquisitely carved. The Government of the Nizam has gone to great

[1] By some writers the lady is said to have been a daughter of the Emperor, which is a mistake. The gravestone is nameless.

[2] Tavernier mentions this tomb in his travels, and states that he met carts coming down from N. India with white marble for it.

expense in restoring this mausoleum.

Below the right corner of the platform a second tomb is said to contain the remains of Rabi'a Daurani's nurse. There is no inscription. To the W. of the mausoleum is a mosque of brick faced with cement (*chunam*) of a dazzling whiteness The pavement is covered with tracings of prayer-carpets. The *mimbar*, or pulpit, is of marble

The Caves of Aurangabad in the Deccan trap, are near Rabi'a Daurani's mausoleum A road goes to the foot of the hill, wherein the caves are excavated in two groups, facing S and E The nine Buddhist caves (except No 4) date from the 7th century, there are five in the W group, and four in another lying ¼ m E **Nos. 2** and 7 may be inspected The sculptures and arrangements of these caves show a distinct approximation to the Brahman caves of Ellora **No 1**, at the W. end of the first group, is a vihara, a good deal higher up than the other four. Only the porch and veranda (76½ ft. by 9 ft) were completed, and the former has been crushed by a fall

No. 2 was intended to be a Chaitya (*c* 650 A.D) At the back of the veranda, 21½ ft. by 13 ft., is an aisle, and behind this is a shrine with a passage all round it, at the sides of the shrine door are two tall figures standing on a lotus flower and *nâga* figures, and inside is a seated figure of Buddha, 9 ft high, in the teaching attitude. Many figures are on the walls of the shrine and the passages

No. 3 is a vihara hall, 41½ ft by 42½ ft., with twelve columns splendidly decorated as in the later caves at Ajanta, there is a decorated recess also, and on each side two cells. In the front corners of the shrine are a number of life-sized worshipping figures with garlands and elaborate headdresses **No. 4** is a chaitya, much ruined, only 38 ft. long and 22½ ft broad, and carried by seventeen plain columns, the dagoba was nearly 6 ft in diameter It dates probably from the 2nd century Of **No 5** only the shrine remains, now dedicated to the Jain Parasnath

No 6, first of the E caves, is much higher up the hill face than the other three caves in that group. The hall was supported by four columns, and the antechamber of the shrine by two more, in the side walls are four cells, and in the back wall two The shrine has a passage round it, and a smaller Buddha with smaller worshippers in front There are traces of painting

No 7 has a veranda with four columns and a chapel at either end, and a hall 38 ft by 28 ft, in the centre of which the shrine has been placed, while three cells have been excavated in each side wall, and two chapels with sculptures in the back wall. To the left of the entrance to the hall is one of the best representations of the Buddhist Litany (p 69), to the right is a figure of Manjusri, patron of the Mahâyana sect The front of the shrine has three large female figures on either side, on the left of the figure of Buddha in the shrine is the representation of a dance and of female musicians

No. 9 is also higher up in the cliff. It consists of a long veranda hall with three chambers and shrines opening from it. On the W. wall is a sculpture of the dead Buddha 16 ft. long.

28 m. S. of Aurangabad by road is **Paithan**, one of the oldest cities in the Deccan, on the N. bank of the Godavari Mention is made of its inhabitants in the 14th Edict of Asoka. It was visited by Greek traders 200-300 B.C and was an Andhra capital *c* 150 A.D. Excavations have disclosed six layers of remains, the lowest dating before 2000 B.C.

110 m from Manmar is **Jalna** (D B), which was from 1827 to 1903 an infantry cantonment Motor service (S) to Malkapur (p 133) *viâ* Buldana Jalna was the place of exile of Abul Fazl, the author of the *Ain-i-Akbari*, and Aurangzeb, when Viceroy of the Deccan, also lived here The fort contains a well with underground chambers From Jalna the battlefield of **Assaye**, 30 m. distant, may be visited Several old forts are passed *en route*, and the two fortified villages of Pipalgaon and Warur on the Kaitna river, which showed Arthur Wellesley the ford, on either side of the stream. A view of the field of battle, fought on 23rd September 1803, is obtained from the tower of the fort of Assaye, on the bank of the Juah, between which and the Kaitna the Mahratta army was drawn up The forces of Scindia and of the Bhonsla Raja of Nagpur consisted of 16,000 infantry and 20,000 cavalry, and the British force of 4500 men all told, the killed and wounded on the British side were 1600 N of it the British dead were buried

181 m Parbhani Junction for Purli Vaijnath connecting there with a broad-gauge line to Vikarabad (p 548) *viâ* Bidar

187 m. **Pingli**. From this station the cavalry cantonment of Mominabad (Amba) can be reached (42 m) Near by are some ruined cave temples, both Brahman and Jain.

199 m. **Purna** (R.). Junction for a branch line to **Hingoli** (50 m.) which was an artillery cantonment from 1819 to 1903. Some of the graves in the British cemetery date back to 1829. Hingoli was a centre of the Thugs, and is mentioned by Meadows Taylor in his *Confessions of a Thug* About 9 m. from **Chondi** stn (21 m) on this line (good road) is the Jaganatha Sivita temple at **Aundha**; a splendid example of mediæval Hindu architecture closely resembling the temple at Halebid (p 586) The carving on the hornblende base is very fine

218 m **Nander** An important centre for motor-bus services (S) N to Hingoli and S W. to Latur (86 m) (p 527) About 1 m. from the station is a Sikh gurudwara, which contains the tomb of Guru Govind, last of the ten Gurus (p lxiii), assassinated near Nander in 1708. Europeans are permitted to enter the temple and sit on a special carpet A training college for young Sikhs is maintained here

269 m Near Basar the Godavari river bridge 1392 ft long (1900)

294 m. **Dichpalli**. The Vishnu temple on a hill near the stn is a specimen of the mediaeval Hindu style, with wonderful stone carving.

386 m from Manmar is **Secunderabad** (p 558).

ROUTE 5.

BENARES AND SARNATH

BENARES ✱ (D.B, Hotels), headquarters of a division and district in the United Provinces (pop 263,100), is situated on the left bank of the river Ganges, which flows here from S to N. and then N E The **Cantonment** station, at which the visitor will alight, is an important railway junction, 429 m from Calcutta by the Peshawar mail (Route 20), 940 m. from Bombay *viâ* Mughalsarai (Route 2) and 76 m from Allahabad by the Bengal and N W Rly (which continues E, 22 m, to Aunrihar Jn, and thence, 37 m, to Jaunpur, and also, 47 m, Ghazipur, and *viâ* Gonda to, 217 m, Gorakhpur)

The Ganges forms a crescent along the city, and a fine view of the long line of bathing-ghats and temples can be enjoyed by the visitor, who makes his entrance across the Dufferin Bridge (p 95) by way of Mughalsarai junction (10 m) The view is apt to be misty in the afternoon, especially in the cold weather

Originally Vārānasi, and commonly called Kashi by the Hindus, who add the suffix Ji as a mark of respect, Benares has been the religious capital of India from beyond historical times It is mentioned in both the *Mahabharata* and *Ramayana* Although known in the 18th century as Muhammadabad, the name did not endure The derivation of the name *Vārānasi* is from the names of the two streams Vāruna (modern Barna), a river of some size on the N and W of the city, and Asi on the S, a mere *nulla* Once the Asi was well away from the city.

Benares is one of the Seven Sacred Cities of the Hindus,[1] and is the great northern centre of the worship of Siva. The annual number of pilgrims who visit it is about a million, while the number of Brahmans residing in the place is over 30,000. Every pilgrim, besides visiting the holy spots in the city, must make the circuit of the Panch Kosi road, unmetalled, outside the city, round the sacred territory of Benares, commencing at the Manikarnika Ghat, proceeding by the Asi Ghat, and returning by the Barna Ghat (see p 95) The route, which is 36½ m in length, and the pilgrimage of which occupies six days, is picturesquely lined by fine trees and small shrines The end of each stage is marked by a picturesque village, with numbers of temples and small *dharmsalas*. Benares is said to combine the virtues of all other places of pilgrimage Any one of whatever creed, and however great his misdeeds, dying within the compass of the Panch Kosi road, is transported straight to heaven This belief leads many people to end their days at Benares Its peculiar sanctity is derived from the "ten-horse sacrifice," referred to under Dasaswamedh Ghat (p 93)

The site of Benares has often changed, and the city is claimed to be the oldest in the world The Chinese traveller Fa-Hian visited it in 399 A.D. and Hiuen Tsang in 629-645 A.D., when he mentions about 100 Siva temples with 10,000 votaries. In past ages it has been a city of sanctity and learning, the home of philosophers and grammarians It was a most important place six centuries

[1] The other six are Hardwar, Ujjain, Mathura (Muttra), Ajodhya (in Oudh), Dwarka (in Kathiawar) and Conjeeveram (in S India).

before the Christian era, for Sakyamuni (Buddha), who was born about 563 B.C. and died in 483 B C, came to it from Gaya to establish his religion Many important writers of the Hindus are first heard of at Benares

It was raided (1033) by a lieutenant of Mahmud of Ghazni We learn from Hasan Nizami's history that in 1194 A D Jaichand, Raja of Benares, 'whose army was countless as the sand,'' was defeated and killed by Quth-ud-din Ghori, and Ala-ud-din Khiji, King of Delhi, destroyed temples and built mosques on their sites From that date Benares was governed by the Muslims, so that hardly one building in Benares dates before the time of Akbar (1556-1605 A D), and few date beyond the second half of the 18th century

Benares was ceded by the Nawab Vizir of Oudh to the British in 1775 Raja Chait Singh, as Zamindar of Benares, continued to farm the revenue In 1779 two battalions from Dinapore enforced payment of a special contribution on account of trouble with the Mahrattas Warren Hastings in 1780 called on the Raja to furnish a cavalry contingent for the same reason When Chait Singh evaded compliance, Hastings in August 1781 went to Benares and placed him under house-arrest The small guard from Major Popham's escorting regiment was overwhelmed by Chait Singh's retainers, being without ammunition Hastings went to Chunar He ordered down reinforcements from Cawnpore and Chait Singh retired to the service of Scindia at Gwalior and died in 1810 The E I Co assumed the administration, and with the appointment in 1787 of Jonathan Duncan (p 89) as Resident, a regular settlement of the revenue was taken in hand

In May 1857 the garrison of Benares consisted of the 37th Bengal Infantry, known to be disaffected, and the Ludhiana Sikh regiment, containing many Hindustanis. Upon the arrival of Colonel Neill with some Madras European Fusiliers from Calcutta, an attempt was made on 4th June to disarm the regiments on parade, but the 37th refused and it became necessary to turn the guns on the Sikhs, who were driven off by the fire of the Horse Artillery battery of Captain William Olpherts The sepoys dispersed by the Jaunpur road The Raja remained loyal

The ornamental **Brasswork** which is met with all over the world is a *spécialité* of **Benares**, but genuine old pieces are difficult to procure Small idols and other images in brass and other materials are made in great quantities in the narrow lanes around the Golden Temple The *Thathera* or *Pital* (*Brass*) *Bazar*, which is about 1 m from the Cantonment Rly station, is well worth a visit White metal (phûl) is likewise largely used for domestic articles **Shawls**, **silks**, and **embroideries** may also be purchased. The weaving of brocades (Kamkhwabs, or Kincobs) is an old Benares speciality its origin cannot be traced Silk is considered pure by Hindus for ceremonial purposes. Mughal Emperors, especially Akbar, encouraged the industry, sending brocades as presents to European monarchs The industry has been revived Indian caste allows the use of silk brocades for all kinds of wearing apparel, upholstery and furniture In brocade work *Kalabatun* (gold thread) is as essential as silk in the weaving The loom employed is somewhat elaborate, and closely approaches the application of machinery · the weaving

is complex because very elaborate patterns are often produced. The workmen display skill in the arrangement of forms and colours with the subdued elegance characteristic of Indian decorative art Several firms sell silks, brocades and kincobs.

The banks of the river Ganges are bordered by Ghats,[1] or flights of stone steps, descending to the water from the most famous buildings in the city, the visitor can view them from a boat

For those who are pressed for time, it will be sufficient to see the Durga (Monkey) Temple, and to proceed thence to the riverside for the Observatory and the Ghats as far as the Panchganga Ghat, disembarking there to see the Golden Temple. This involves an interesting walk of ¾ m through narrow picturesque streets

A Guide-book is *Kashi or Benares*, by the Rev. E Greaves (Indian Press, Allahabad) Mr E. B Havell's *Benares, the Sacred City* (Blackie, 1905), is well edited and illustrated Americans and others may be reminded of the amusing chapters 53–56, about Benares, in Mark Twain's *More Tramps Abroad* (Chatto & Windus, 1898)

The river Ganges and the Indian city are nearly 3 m. from the

Cantonment, N. of the railway line and N W. of the city Near the *Hotels* is **St Mary's Church**, with old tombs removed from the old city cemetery in Chaitganj N. of these, on the opposite side of the river Barna, which is crossed by a stone bridge, is the **Civil Station** of Sikraul (Secrole), here are the District Courts, the Club, the Imperial Bank of India, and residences. Beyond the Civil Courts is a house known as **Hastings House**, a sun-dial of Chunar stone on the edge of the road outside the garden was, according to the inscription upon it, erected by Lieut. James Ewart in 1784, by order of Warren Hastings From this quarter a road leads to Sarnath

Recrossing the bridge and proceeding by Raja Bazar Street, the visitor will find the Nandeswar Kothi, the Post Office, the old Mint House, and Queen's College.

The **Nandeswar Kothi** belongs to the Maharaja of Benares, where he entertains distinguished visitors —King George V. as Prince of Wales stayed here in 1906, with the Princess, now Queen Mary Here Mr Samuel Davis,[1] Judge and Magistrate of Benares, was attacked by the followers of Wazir Ali, the deposed Nawab of Oudh, who had just killed Mr Cherry, the British Resident, in the building now occupied by the Collector's Court, on the 14th of January 1799 Mr Davis sent his wife and two children on to the roof, and, with a running footman's pike, placed himself at the top of the staircase leading to it, where he successfully defended himself until he was rescued by the arrival of a regiment of cavalry from Bitabur, the old Cantonment 10 m. away. A tablet was affixed by Lord Curzon to the wall of the house.

Opposite, the **Old Mint House** belongs also to the Maharaja; another of Lord Curzon's tablets records that it was built as a Mint in 1820-21 from the designs of James Prinsep, the celebrated antiquarian, who resided here

[1] A map faces p. 98

[1] Davis was an accomplished amateur artist, and a collection of his water-colours is on view at the Victoria Memorial Hall, Calcutta (p. 115).

as Mint Master until the abolition of the Benares Mint in 1830 [1] It was a place of refuge for European inhabitants of Benares in 1857. In 1926 the interior was remodelled, and a flight of steps leads up to a banqueting hall and drawing-room

From the Nandeswar Tank the Grand Trunk Road (from Calcutta) skirts the N of the city At 1½ miles along it the **Bakariya Kund**, on the right side of the road, is a tank teeming with Muslim monuments and mosques converted from Hindu buildings, and built of their materials, close to it is a shrine, known as the Battis Khamba, or Thirty-two Pillars, now a Muslim tomb

The **Lat Bhairon**, in the loop made by the B and N W and E I. Rly. lines, is now represented by the stump of a massive pillar, painted red, which stands in a small enclosure in an open *idgah* (Muslim place of worship on festival days). It was pulled down in 1809 during a serious riot, and was broken to pieces It is probably a Buddhist relic, and may possibly be one of the Lats erected by King Asoka

The **Ganj-i-shahid Mosque**, not easy to find, behind some broken-down steps, on the S side of the open space in front of the Kashi Railway Station, was erected as a memorial of the Muslims who fell in the early captures of Benares It is another instance of the conversion of an old temple, supposed to be Buddhist, to the uses of the Muslim faith

Near the Kashi stn. also is the **Arhai Kangura Mosque**, which probably dates from the early period of Muslim conquest The pillars have clearly been taken from some older temple. Its name (*arhai*, two and a half, *Kangura*, dome) is belied by the single dome. There is a Hindu inscription of 1190 A.D.

The drive may be continued to Ramnagar (p 95).

Continuing from Nandeswar Tank along Raja Bazar Road, the London Mission is on the S. side of the railway, while the Victoria Hospital of the London Mission and the Church Mission are at Sighra, over 1 m. S. of the Cantonment Railway Station

S of Pensioners' Lane the **Pisach Mochan Tank** is connected with Bhairon On the platform of one of the surrounding temples is the head of the *pisach* (goblin or demon) from whom Bhairon delivered the city (*mochan*, deliverance) There is an illustration of this strange object in Mr Greaves' *Guide*

The **Hindu College and School**, S. of the Allahabad road, is in the Kamachcha quarter It was started in 1899 under the auspices of Mrs Annie Besant, and had for its object the combination of religious and moral education with mental and athletic development for Hindu youths The College, visited by King George V., then Prince of Wales, on 19th February 1906, is now used as a high school

Raja Bazar road continues as Bagh road past the **Queen's College**, which was erected by Major Kittoe, of the Bengal Engineers, in 1847-52, a handsome building in the Gothic style. On the N. side is an ancient monolith, 31½ ft high, found near Ghazipur. On the obelisk there is an inscription (which has not been deciphered) and an English record of its removal To the N E., adjoining the College grounds, is the Saraswati Bhawan, containing a famous collection of Sanskrit MSS. The Sanskrit department of the College is renowned for its

[1] Visitors should procure a sight at some public library of *Benares Illustrated*, a series of beautiful lithographs after drawings by James Prinsep published at Calcutta in 1831.

pandits. A tablet in the S.E corridor inside the main entrance to the College records the foundation in 1791 of the original Sanskrit College by Jonathan Duncan, who was resident at Benares from 1787 to 1795 and Governor of Bombay from 1795 until his death there in 1811

At the Bagh the road turns S and then forks One branch, Chaitganj Road, the main carriage approach to the river, passes the old Chaitganj cemetery and the *Victoria Park* (in which there is a statue of the Queen-Empress), and leads to the Dasaswamedh Ghat (p. 93)

THE DURGA, OR "MONKEY" TEMPLE

Most of the principal temples are in the centre of the city and are described later But, as the visitor makes his way S to the University buildings, he will pass one shrine which figures prominently in every book on Benares

The Durga Temple, miscalled the Monkey Temple by Europeans from the numbers of monkeys which inhabit the large trees near it, is about three-fifths of a mile S. of the Vizianagram Palace It is stained red with ochre, and stands in a quadrangle surrounded by high walls In front of the principal entrance is the band room, where musicians beat a large drum three times a day. The central portion is supported by twelve curiously-carved pillars on a platform raised 4 ft. from the ground. Through the doors, plated with brass, the image of the goddess may be seen, in the porch are two bells One of these bells has a curious history. Round the rim is engraved the following inscription in Urdu characters " Mister Willim Jems Garant sahib Bahadur Kalaktar shahr Banaras mah Asarh Fasli 1215 " William James Grant, who was Collector of Benares in A.D. 1808 (which corresponds with the Fasli year 1215), was out on the river with his wife and children when they were caught in a whirlpool off Garhwa Ghat, which is near the Maharaja's palace at Ramnagar (p 98) The boatmen invoked the aid of the goddess Durga and brought the boat to shore with the greatest difficulty, whereupon the Collector presented the bell as a thank-offering [1] The temple and the fine tank adjoining (Durga Kund) were constructed by Rani Bhawani of Natore in Bengal in the 18th century As Durga is the terrific form of Siva's wife, and is said to delight in destruction, bloody sacrifices of goats are offered to her here

Next to the temple is the white marble tomb and shrine of Swami Bhaskarananda Although entirely modern, it is one of the most beautiful buildings in Benares and commemorates an interesting personality

To the S is the **Vizianagram Palace**, and close to this on the W are several Jain Temples This is the reputed birthplace of Parasnath, the famous Jain Saint

Further S the **Benares Hindu University** should be visited The buildings, which cover an area of 2 sq. m., are some distance from the river-bank, and are almost opposite the Ramnagar Fort on the other side of the Ganges (p 98) The foundation-stone was laid by Lord Hardinge in 1916, and the University moved into the buildings in 1921. Pandit Madan Mohan Malaviya (1862-1946), a leader of the Hindu Mahasabha, was Vice-Chancellor for many

[1] In 1928, the bell was cleaned at the request of the Collector, Mr V. N Mehta, I C S, who is a Brahman, and the inscription was deciphered by Mr Jagannath Das Ratnakar.

years. The various Departments form the diameter of a semicircle, behind them are hostels and extensive playgrounds, the residences for the staff are on the circumference

Down the fork of Chaitganj road, running E, the road runs through the city to pass the Zenana Mission, the Ishwari Memorial Hospital (built by the late Maharaja H H Parbhu Narain Singh, Bahadur, in memory of his father), and the King Edward VII General **Hospital**, built by gentry of Benares to commemorate the visit of Edward VII, then Prince of Wales, to the city in 1870 Adjoining the Hospital is the **Garden of Madho Das**, now in the possession of the Radha Swami sect, where Warren Hastings was encamped when he gave orders to arrest Raja Chait Singh, of Benares (see p. 87), on 16th August 1781, and five days later he was obliged to retreat by night to Chunar. At a later date (1787-1795) the house was occupied by the Resident, Jonathan Duncan (p 89) At the Municipal Gardens will be found the Town Hall (built by the Maharaja of Vizianagram a Madras landholder, who died here in 1845), and the Kotwali, or central police station, which looks like a fort A road runs S to the Golden Temple (p 96) The Machodri garden (Gokul Chand Park) is on the Rajghat Road, with temples near by (p 97)

THE RIVER FRONT

From the Durga Temple, connected with the Asi Ghat by a very narrow road, the visitor may embark either at the upper end of the Ghats from the Asi Ghat, or more conveniently from the central **Dasaswamedh** or **Man Mandir Ghat** (1½ m.), and be rowed slowly past them. In the following account the Ghats are given in succession from the S, proceeding downstream

The **Asi Ghat** is one of the five special places of pilgrimage in Benares These are known as the **Panchtirath**, and the pilgrim should bathe in them successively on the same day, proceeding from Asi to Dasaswamedh and the Barnasangam (beyond the Dufferin Bridge) and then retracing his steps to Panchganga and Manikarnika The channel of the Asi is about 10 ft broad. The steps at the Ghat are a good deal broken. Boats are available to cross from Nagwa Ghat (the next on the S.) to Ramnagar, the palace of the Maharaja of Benares, but there is a ferry also at Ramnagar, with a metalled road running from the city to Ramnagar ferry

The next, **Lala Misr Ghat**, belongs to the Maharaja of Rewa At the N end of the **Tulsi Ghat**, which follows, huge masses of masonry have fallen, and lie on the river's edge, this Ghat is named after Gosain Tulsi Das, author of the famous version in Hindi of the *Ramayana*, who died at Benares in 1623 He is said to have lived in the corner building at the N of the Ghat, while writing the latter part of the epic (which contains 12,800 lines), and also to have composed there the *Rama-dalaka*, one of his minor poems, in a single night His shoes and pillow (takya) and a piece of wood on which he is supposed to have crossed the Ganges, are preserved, but are not, as a rule, shown to visitors

The **Janki Ghat** is new; at the top are four Siva temples with gilded pinnacles, and behind them is the fine Lularik well At the foot of the Ghat is the pumping station of the Benares Water Works. The **Bachhraj Ghat** belongs to the Jains, who have built

three temples on the bank of the river.

Next comes the **Sivala** (Shiwala) **Ghat**, where the fort in which Chait Singh resided stood. It is a handsome building, and appears as fresh as when first constructed. From a window in the face Chait Singh made his escape when he escaped from arrest in 1871. It is now called the Kali Mahal, after the goddess Kali, and was repurchased by the Maharaja of Benares. In the courtyard two Grenadier companies of Sepoys and three young officers, guarding Chait Singh, were massacred. The graves of the officers, distinguished by a memorial tablet, lie in a lane at the back of the palace There is a memorial in the Cantonment churchyard. (The walled enclosure in which the sepoys were interred is close to the Chaitganj police station, on the road from Queen's College to Dasaswamedh Ghat.) The Sivala Ghat is one of the finest of all the Ghats Part of it is assigned to the religious ascetics called Gusains

The next, **Dandi Ghat**, devoted to the staff-bearing ascetics called Dandi Panths, is very fine

Hanuman Ghat is generally crowded; at the top of it is a temple of the Monkey God

The **Smashan** (or **Masan**) **Ghat** is used as a subsidiary cremation ground, and wooden pyres may be seen being built, while bodies wrapped up in white or red cloths lie with their feet in the Ganges ready to be burned The Ghat is also known by the name of **Raja Harish Chandra**, a favourite hero of Hindu drama, who gave up his kingdom, and selling his wife and child into slavery, became the slave himself for a year of the *chandal*, or outcaste, whose duty it was to attend to the burnings at this very Ghat.

Passing the **Lali Ghat**, the temple just above **Kedar Ghat** is the popular shrine of the Bengalis, who inhabit this quarter of the city and also of the Tilanga pilgrims (from S India) Kedar is a name of Siva, but it also signifies a mountain, and especially a part of the Himalayan mountains, of which Siva is the lord, hence called Kedarnath. His temple is spacious, and the centre is supposed to be the place where Kedarnath dwells, the interior can be seen from the doorway. At the four corners are Sivalas, with cupolas There are two brass figures, hidden by a cloth, which is removed on payment of a fee The walls and pillars are painted red or white There are also two large black figures, which represent *dwarpals*, or janitors, each has four hands holding a trident, a flower, a club, and the fourth empty to push away intruders Half-way down the Ghat is a pool cut in the steps called the Gauri Kund, or "well of Gauri," Siva's wife, the waters of which are considered to possess healing properties; on the steps of the Ghat are many lingam emblems of Siva

The **Mansarowar Ghat** (built by Raja Man Singh) leads to a tank, round which are sixty shrines, now very dilapidated. Mansarowar is a lake in Tibetan territory, just across the borders of British India, at the foot of the Kailash mountain, where the god Siva is believed to have had his abode, and very near the source of the Ganges. Near the tank is a stone 4½ ft high and 15½ ft in periphery, which is said to grow daily to the extent of a sesamum seed In a street to the E. of the tank are figures of Balkrishna, or the Infant Krishna, and Chatarbhuj or Vishnu.

At the **Chauki Ghat**, under a pipal, are idols and figures of snakes. In a street close by, called

Kewal, is a figure of Durga with ten arms

The **Someswar Ghat** is so called from the adjacent temple of the moon (*Soma*="moon," and *Iswar* ="lord"). Every kind of disease is supposed to be healed Close by is an alley, in which is the shrine of Barahin Devi, a female Æsculapius, who is worshipped in the morning, and is supposed to cure swollen hands and feet The head of the **Narad Ghat**, named after a famous Rishi, winds up under two fine pipal trees

At **Raja Ghat** the stairs ascend into a large house, or *sarai*, built by Amrit Rao for Brahmans The **Chausathi Ghat** is old The **Rana Ghat**, built by the Maharana of Udaipur, is not much frequented

The **Munshi Ghat**, most picturesque, was built by Munshi Shri Dhar, Diwan of the Raja of Nagpur, and now belongs to the Maharaja of Darbhanga (p 463) **Ahalya Bai's Ghat** between this and the Dasaswamedh Ghat was built by the wise Mahratta Princess who governed Indore from 1767 to 1795 (p 146) Both the ghat and the building which surmounts it are striking.

The **Dasaswamedh Ghat** is one of the five celebrated places of pilgrimage in Benares, the other four being the junctions (sangam) of the Asi and Barna with the Ganges, and the Manikarnika and Panchganga Ghats. It is specially thronged during eclipses Here Brahma is said to have offered in sacrifice (*medh*) ten (*das*) horses (*aswa*), and to have made the place equal in merit to Allahabad The road to this Ghat from the W. was formerly the only approach to the river between the two extreme ends of the town, until the Municipality opened up another but much less important road at the Masan (Smashan) Ghat (see above), called the Harish Chandra Road.

At the S. end of the Ghat, which should be visited on foot, is a low whitewashed shrine of Sitala, the goddess of smallpox, and of the presiding deity of the Ghat, figured under a brass lingam Farther on at the Ghat are life-size stone figures in niches of the Ganges, Saraswati, and Jumna rivers, and of Vishnu, the Trimurti or Trinity, and the Narsingh or lion-man incarnation of Vishnu, which are passed on the way to the

Man Mandir Ghat (and **Observatory**), much admired by some experts: Mr Havell, however, says that the greater part was restored at the end of the 19th century, with inferior brick and plaster [1] One portion of the original work remains High up, on the extreme N E corner, is an exquisite stone balcony which is one of the gems of Benares A good view can be had from the river, but a better one from the Ghat, standing N.E of it. This lofty building gives a fine appearance to the Ghat, and commands a beautiful view of the river. It was erected by Raja Man Singh of Amber (p. 222) about the year 1600

The Observatory was added by Raja Sawai Jai Singh, the founder of Jaipur, who founded four other Observatories—at Delhi, Muttra, Ujjain, and Jaipur. On entering the Observatory, the first instrument seen is the Bhitti-yantra, or "mural quadrant." It is a wall 11 ft high and 9 ft. 1¼ in. broad, in the plane of the meridian, by this are ascertained the sun's altitude and zenith distance, and its greatest declination, and

[1] An oil painting by Thomas Daniell, in the rooms of the Asiatic Society of Bengal at Calcutta (p 112), shows the original river front

hence the latitude. Then come two large circles, one of stone and the other of cement, and a stone square, used, perhaps, for ascertaining the shadow of the gnomon and the degrees of azimuth.

The Samratyantra is a wall which is 36 ft long and 4½ ft broad, and is set in the plane of the meridian One end is 6 ft 4½ in high, and the other 22 ft. 3½ in, and it slopes gradually up so as to point to the North Pole By this, the distance from the meridian, the declination of any planet or star and of the sun, and the right ascension of a star, are calculated There are also a double mural quadrant, an equinoctial circle of stone, and another Samratyantra Close by is the Chakrayantra, between two walls, used for finding the declination of a planet or star, and near it a Digamsayantra, to find the degrees of azimuth of a planet or star The instruments are fully described in a leaflet obtainable at the Observatory [1]

The **Mir Ghat** (used by Muslims) leads up to the Dharm Kup, or Sacred Well, and the Lalita Ghat to the **Nepalese Temple**, no doubt picturesque, but disfigured by indecent carvings, they do not catch the eye, provided that the attendant can be discouraged from pointing them out This temple is remarkable for a double roof such as those which are placed on Chinese temples to break the fall of snow

The famous **Golden Temple** is some way from the river (see p. 96) between this Ghat and the **Jalsain Ghat**, or Burning Ghat, which is crowned by a mass of temples and spires Numbers of cremations are usually in progress on the spot, and many sati stones will be noticed all round it; it is naturally regarded by the Hindus as one of the most holy places in the whole of Benares. The name is derived from Vishnu in his manifestation of Jalsai, "the sleeper on the ocean"

The **Manikarnika Ghat** is considered the most sacred of all the Ghats, and in November is visited by multitudes of pilgrims. Just above the flight of steps, which are enclosed by piers running out into the river, is the Manikarnika Well, or pool, and between it and the steps is the temple of Tarkeswar The well has its name from *Mani*, "a jewel," and *Karna*, "the ear." Parvati, the wife of Mahadeo, is said to have dropped her earring, and Mahadeo in searching for it, dug a large hole with his discus This became the tank, and the God's sweat filled it with water During an eclipse of the sun it is visited by great numbers of pilgrims The well, or, more properly, tank, is 35 ft square, and stone steps lead down to the water Offerings of the Bel tree, flowers, milk, sandalwood and sweetmeats are thrown into it Between the well and the Ghat is the Charanpaduka, a round slab projecting slightly from the pavement, on which stands a pedestal of stone, on its marble top are two imprints, said to have been made by the feet of Vishnu The privilege of being burnt at the Charanpaduka, instead of the usual burning Ghat, is confined to a few families, and is much prized At the second flight of steps of this Ghat is a temple to Siddha Vinayak, or Ganesh. The idol has three eyes, is painted red, and has a silver scalp and an elephant's trunk covered with a bib At the feet of the image is the figure of a rat, which is the vahana, or "vehicle," of Ganesh Overhanging the Ghat is the red-domed temple of the Raja of

[1] See also *A Guide to the Old Observatories at Delhi, Jaipur, Ujjain and Benares*, by G R. Kaye (Calcutta, 1920).

Amethi (an Oudh landowner), which is one of the best from an artistic point of view

The **Dattatreya Ghat** is called after the great Brahman saint and teacher, in whom parts of the three great Hindu deities, Brahma, Vishnu, and Siva, were said to have been incarnated His *paduka*, or footprint, is shown in a small temple on the Ghat

Scindia's Ghat was intended to have been one of the grandest of the whole front, but, owing to the great weight of the superstructures, the foundations sank and the Ghat is being reconstructed in cement concrete It was built about 1830 A D by Baiza Bai, widow of Daulat Rao Scindia

Passing two Ghats, the **Bhosla**, miscalled the Ghosla, **Ghat**, was built by the **Nagpur** Raja more than one hundred years ago, and is very massive The next Ghat was built by the last of the Peshwas The **Ram Ghat**, which comes next again, was built by the Raja of Jaipur

The next large Ghat is the **Panchganga Ghat**, beneath which five rivers, Ganges, Jumna, Saras wati, Kirana and Dhut papa are supposed to meet, it was built by Raja Man Singh Above it rises the **smaller mosque** of Aurangzeb, called in old maps the "**Minarets.**" These were taken down and restored under the direction of James Prinsep (p 112) as the foundations were giving way The mosque occupies the site of a temple to Vishnu under the name of Bindu Madhav, which is described by Tavernier, and this is the probable reason for the local name (Madho Rai ki Masjid) The view from the top of the minarets, which rise nearly 150 ft above the platform of the mosque, is extremely fine, but it is quite worth while to ascend to the roof of the building The two *stupas* at Sarnath can be seen from here, and the Mirzapur Hills to the W. From the river the view of the mosque is equally good

Four unimportant Ghats lie between this and the second Sitala or Raj Mandil Ghat, below which is the **Gai Ghat**, so called from the stone figure of a cow

The **Trilochan Ghat**, the next reached, has two turrets in the river, and the water between them possesses a special sanctity The pilgrims bathe in the Ganges at this Ghat, and then proceed to the Panchganga and there bathe again At the head of the Ghat is a temple of Trilochan, or the Three-Eyed, another form of Siva From the **Prahlad Ghat**, the last masonry Ghat, a view is obtained of the whole river front Farther down the stream is the site of the old Raj Ghat ferry, replaced by the railway and road bridge; also by a pontoon bridge, except in the rains These bridges are near the **Raj Ghat** the *Barna Sangam*, or junction of the Ganges and Barna is ¼ m downstream

The **Dufferin Bridge**, completed 1887, is 3518 ft in length (seven spans of 333 ft) and carries the Grand Trunk Road Raj Ghat Fort dated from antiquity and is now dismantled There are clusters of temples at the confluence with the Barna. Within the area of the Fort and in the S corner of the plateau is the **Tomb of Lal Khan**, a minister of a former Raja of Benares, with coloured tiles and mosaics, described by Mr Havell as one of the few original Muslim buildings in Benares with any pretensions to architectural beauty To the N.W is the **Palang Shahid**, a small Muslim cemetery

and close to the Dandpan and Kal Kup. In the garden of the temple is a small house or hut in which Tulsi Das (p. 91) is said to have composed his *Binaya Patrika*, a poem which such authorities as Sir George Grierson pronounced to be superior to the *Ramayana*. A tablet was affixed to the wall by Lord Curzon. The Kameswar temple of the God of Love lies to the N.E. of Bhaironath and near the Machodri garden (Gokul Chand Park). It is of the 12th century and quite interesting.

The dingy **Briddhkal** temple, which lies N.E. from the Municipal Garden, is one of the oldest in the city, and originally had twelve courts, of which seven remain. It contains a well and a small tank renowned for the healing of diseases. The name *Briddhkal* means "the fate of old age"; and the temple is said to have been built by an aged and infirm Raja whom Mahadeva restored to youth and health. **Alamgir's Mosque** is situated in a back alley about 100 yds. to the S. The pillars are ancient and are supposed to be Buddhist.

The palace and fort of the Maharaja of Benares at **Ramnagar**, (ceded 1918), on the right bank, may be visited by permission, to be obtained from the Secretary to His Highness. It affords a splendid view of the river front. There is a temple of some interest. The late Maharaja Sir Aditya Narayan Singh (d. 1939) belonged to the family of Raja Balwant Singh, father of Raja Chait Singh. Maharaja Vizhuti Narayan Singh (b. 1927) was adopted. The State was created in 1911, when the late Maharaja was granted the powers of a Ruling Chief in his domains. These extend over an area of 875 sq. m., with an annual revenue of 35 lakhs, which includes the income from extensive estates in British territory. Previously the title was personal, obtained from the Mughal King in 1738.

SARNATH

Sarnath,[1] the site where Buddha preached his first sermon, is some 4 m. N. of Benares, not far from the high road to Ghazipur, which is left at the third milestone. Shortly after turning to the left two towers are seen—the Chaukhandi, on a hill, the other the Dhamekh[2] *stupa*. Sarnath can also be reached by the B. & N. W. line from Benares Cant. stn. to Mau junction and Bhatni.

Rules for observance by visitors should be studied.

Sarnath was known as the "Deer Park," and is prominent in one of the Jataka, or Birth-stories of the Buddha. In his lifetime his five early attendants retired there for meditation after forsaking their master, there Buddha first made known his doctrines to the world. Buddhists have always revered the spot where he sat and preached as holy ground. The Chinese travellers—Fa-Hian, at the beginning of the 5th century, Hiuen Tsang, about 640 A.D.—visited the site. The former mentioned two monasteries as existing in the Deer Park, and four memorial topes, which he saw. The latter, Hiuen Tsang, described more fully the whole *sangharama* (monastery) as he saw it. He mentioned 1500 priests in the con-

[1] See the *Guide to the Buddhist Ruins of Sarnath*, by Dayaram Sahni (5th Edition, Delhi, 1933), or *Guide to Sarnath*, *Majumdar* (Delhi 1937).

[2] Dhamekh is a corruption of Dharmeksha, the pondering of the Law.

BENARES
Scale of Yards
0 400 800 1200 1600 2000
To Sarnath
Daulatpur
JAUNPUR ROAD
DITHAUR MARIAL RD
Sikraur
Judge's House
Civil Court
Imperial Bank
Khajuri Temples
KHAJURI ROAD
Hukulpur
BARNA RIVER
From Ghazipur
Dhalwaria
Sarai Heth
Konian
Lat Bhairon
Hotels
St Mary's Ch
Nandesar Kothi
RAJA BAZAR RD
Old Mint House
Hospital
Nandesar Tank
Temple
CANTONMENT
Chauka Ghat
B & NW RY
GRAND TRUNK ROAD
E I RY
City Station
Bakariya Kund
TRUNK ROAD
MAINPURA RD
Cantonment Sta
Queen's College
TALIA BAGH RD
From Fyzabad
E I RY
From Lucknow
GRAND TRUNK ROAD
Zenana Mission
Branch Mission Turk
Municipal Office
King Edward's Hospital
THEATRE CLUB ROAD
Alamgirsa Mosque
Arha Kangura Mosque
Lakul Chand Park
KASHI ROAD
Kotwali
Town Hall
Harish Chandra Sch
Kameswar Temple
Trilochana Ghat
Smaller Aurangzeb Mosque
Panchganga Ghat
GRAND TRUNK ROAD
To Mughal Sarai
SUNA ROAD
NAUTANGABAD ROAD
Victoria Park
Allahabad Bank
Mahadeo's Temple
Baseswar's Temple
Aurangzeb Mosque
Church Mission
Victoria Hospital
Nepalese Temple
Sighra
LAKSHMI ROAD
Night Sch
ALLAHABAD ROAD
Manduadih Sta
Central Hindu College
Manasarwar Tank
Bhardeswar Temple
Vizianagram Palace
DURGA KUND ROAD
GHAT ROAD
Durga Kund
To Ferry and Hindu University
To Ramnagar

original walls and the additions subsequently made to them in the interior of the building, it is evident that they were intended to support a massive and probably lofty superstructure" A small *stupa* in the S. chapel of the Main Shrine is surrounded by a stone railing cut entire from one single block of stone, and the chiselling and polishing of the stone have been executed with a skill which it would be impossible to surpass. Two inscriptions noticed on it are not earlier than the 3rd or 4th century A.D., but its workmanship connects it with the epoch of the Emperor Asoka (274-237 B.C.). The Main Shrine continued in use to the 11th century A.D. Round it was a concrete pavement, 40 ft square, covered with numerous chapels, *stupas*, and monuments of brick, plaster, and stone, ranging from the Kushana period (45-225 A.D.) to the destruction by the Muslims

Most of the area excavated under the pavement is occupied by a large rectangular chamber or court measuring 48 ft by 28 ft., with a variety of other structures adjoining it This chamber was surrounded on three sides by a railing of Mauryan date (321-184 B.C.), built into the brickwork of the walls. The position of all the columns and cross-bars is clearly marked by indentations in the brickwork. The excavations have been extended some distance on every side of the Main Shrine, disclosing numerous small chapels and *stupas*, separate and in groups, some in perfect preservation, and yielding numbers of sculptures from the relic chambers The Northern—called the Monastery—Area has already revealed parts of four monasteries, three being of the 3rd, the largest of the 11th or 12th century A.D.

To the W of the Main Shrine is the broken shaft of the Asoka sandstone column. The capital is in the Sarnath Museum. The portion still standing measures 16 ft. 8 in. in height, with a diameter of 2 ft. 6 in at the bottom The whole height, including the capital, appears to have been about 50 ft. The capital, "which measures 7 ft high, is of the Persepolitan bell-shaped type, surmounted by four magnificent lions sitting back to back with a wheel between them—symbolising the law of the Buddha, which was first promulgated at Sarnath Beneath the lions is a drum ornamented with four animals in relief—viz., a lion, an elephant, a bull, and a horse—separated from each other by four wheels The four crowning lions and the reliefs below are wonderfully vigorous and true to nature. That the column was set up by the Emperor Asoka is evident from the presence of an edict on the portion still *in situ* This edict enjoins that whatsoever monk or nun creates schisms in the *sangha* should be made to put on white clothes and reside outside the convent. His Sacred Majesty further urges that his order should also be made known to the lay-members. The superintendents of the sacred law should also familiarise themselves with the edict, and make it known in their own circles and elsewhere"

Much of the débris has been cleared from a large *stupa* about half a mile to the S of the Dhamekh Tower in a mound known locally as the Chaukhandi or "square" mound, and on its summit is an octagonal brick tower, erected by the Emperor Akbar in 1588 A.D. to commemorate a visit of his father, Humayun, to the spot An inscription in Arabic characters on a stone slab above the doorway contains the following record. "As Humayun, king of the Seven Climes,

now residing in paradise, deigned to come and sit here one day, thereby increasing the splendour of the sun, so Akbar, his son and humble servant, resolved to build on this spot a lofty tower reaching to the blue sky. It was in the year 996 A H. that this beautiful building was erected" It is believed that the whole *sangharama* at Sarnath, as elsewhere, was surrounded by a massive circuit wall, 9ft thick

The sculptures brought to light at Sarnath "divide themselves naturally into four groups - the first comprising those of the Mauryan epoch, the second those of the Kushana epoch, the third belonging to the age of the Imperial Guptas, and the fourth including all later examples. The chief examples of Mauryan work are the Asoka column and capital, the railing in the Main Shrine, portions of another railing, and two separate capitals The Kushana group is represented mainly by two colossal pieces of carving, one a Bodhisattwa statue standing 9½ ft high, the other a gigantic umbrella measuring 10 ft across, and adorned on its under surface with designs of animals, religious symbols, and geometric patterns" These carvings are now in the Museum

The important building age was the age of the Imperial Guptas (320-455 A.D.), at that time there was an important and wide-reaching school of sculpture The Gupta origin of the Dhamek *stupa* is now no longer doubted, its decoration is reproduced in one or other of the Gupta sculptures unearthed "This Gupta style exhibits many semi-classical affinities, due to the influence exerted on it by Mauryan, and still more by Gandhara Art. Its pervading spirit, however, and the decorative 'motifs' which peculiarly distinguish it, are essentially and indisputably Indian. Of these motifs the most characteristic are floral arabesques treated with superb grace and boldness, and often enriched by the addition of human figures clinging in supple attitudes among the foliage Geometric designs, too, of an intricate but never bewildering nature, play an important *rôle* in the schemes of decoration, while motifs borrowed from jewellery are perhaps more conspicuous in this than in any other school of Indian Art. No less characteristic is the treatment of human figures, which are free from the exaggerated development that repels us from most Indian sculpture"

Among the Gupta sculptures are two bas-reliefs of special interest - one in eight panels, referring to the eight chief places of Buddha's life while the other depicts events thereof Inscriptions, on statues, images, and seals, help to fix dates and the name of the monastery where Buddha's first sermon was delivered—namely, **Dharmachakrapravarttana vihara** or, short, **Dharmachakra.** The difficulty is to identify the buildings as they now are with those mentioned by the Chinese travellers. Two, the Monastery No. 1 and the Main Shrine, are later than the date of Hiuen Tsang

One of the things that a visitor must now see is the temple built by the Maha Bodhi Society of India, Japan, and Ceylon, known as the Mula Gandhakuti Vihara The chief feature is a series of interior frescoes executed by a Japanese artist The frescoes depict scenes from the life of Lord Buddha. In the temple is one of the relics from the Main Shrine, and one from Nagarjunakonda (p. 582) Outside is an Aswatha tree transplanted from Ceylon, where a seed of the original tree of Budha Gaya was planted in about 300 B.C

ROUTE 6.—CALCUTTA CITY AND ENVIRONS

[Maps face pages 124 and 132]

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History.—The capital of the Bengal Presidency[1] is of more recent birth than the capitals of the two other Presidencies. Hooghly, at which a factory had been established in 1642, was abandoned (1686) for three villages on the present site, Sutanati, Kalikata, and Govindpur Job Charnock was the leader of the merchants Driven down the river, they returned (1687). At the India Office are eleven volumes of "Bengal Consultations" (July 1690 to 1706); in the first of these may be read, in the words of Charnock himself, how the English occupied Sutanati, abandoned for Madras (1688), for the third time (1690). Permission to rent the three villages was given in 1698 by Prince Azamus Shan, grandson of the Emperor Aurangzeb. Until December 1699, Bengal was subordinate to Fort St. George (Madras), and the first Governor of Fort William was Sir Charles Eyre, Charnock's son-in-law, for the New Company

Sir John Goldsborough in 1696 laid out the lines of a fort (on the W side of what is now Dalhousie Square) in the Kalikata village area and to which the name of Fort William was given in honour of the reigning King

Calcutta continued to flourish, owing to its favourable position at the gate of the principal waterways of N India, until 1756, when it was attacked and taken by the Nawab of Murshidabad, Suraj-ud-daula. Most of the British, including the Governor, fled down the river in ships to Falta; the others became the victims of the historical tragedy of the Black Hole (20/21 June). In December Colonel Clive arrived with troops from Madras and ships under Admiral Watson. Calcutta was retaken by them on 2nd January 1757, the Nawab's position was attacked on 4th February, and his forces were withdrawn from near the town.

After negotiation the Nawab promised to restore the trading privileges of the Company and return the property The Seven Years War, between the French and British, was anticipated by the capture of Chandernagore (23rd March) Encouraged by French in his service and by hints of support from the Mahratta Chief of Nagpur, Suraj-ud-daula ultimately refused to accept an exclusive alliance with the British, and this led to the Battle of Plassey, on 23rd June 1757, and Suraj-ud-daula's death

Mir Jafir, the next Nawab set up by Clive, gave the English the zemindari of the 24 Parganas, as well as a free gift of the town Heavy compensation was paid to the Company and its servants, and with part of the compensation money Govindpur was cleared of its inhabitants

The foundations of the present Fort William were laid in 1758 The building was completed about 1781 at a cost of two millions sterling, half a million of which was spent to protect the west face from the erosion of the river. The clearing of the jungle round the fort led

[1] Busteed's *Echoes from Old Calcutta* (Thacker, Calcutta, 3rd edn., 1897) contains much information about the place at the end of the 18th century Another excellent book on the same period is the *Memoirs* of William Hickey (Hurst & Blackett) Blechynden's *Calcutta, Past and Present* (Thacker, 1905), Firminger's *Guide to Calcutta* (Thacker), and Cotton's *Calcutta, Old and New* (specially recommended; Newman, Calcutta), are also full of interest See also *Calcutta and Environs*, Sir Hassan Suhrawardy (Calcutta, 1924)

to the formation of the *Maidan*, and the European quarter, which was located between Canning Street and Hastings Street, began to extend southwards along Chowringhi In 1774 Warren Hastings, Governor of Bengal two years previously, was made the first Governor-General of Bengal, with authority over Bombay and Madras in political relations, and the Supreme Court of Judicature was established. The old Cathedral of St John was built between 1783 and 1787, and the Bishopric of Calcutta was created in 1813, the first Bishop being Thomas Middleton, and the second (1823), Reginald Heber. Other distinguished occupants of the See have been Daniel Wilson (1833-1858), who built the modern Cathedral, Cotton (1858-1866), founder of the schools at Simla and Bangalore, and Milman (1867-1876). The "great apartments" of the present magnificent Government House were opened on the 4th May 1802, "being the anniversary of the fall of Seringapatam", the Town Hall was completed in 1813, and the Mint between 1824 and 1830, while the Botanical Gardens at Sibpur, on the right bank of the Hooghly, were laid out as early as 1786

In 1854 Calcutta passed with the rest of Bengal under the direct control of a Lieutenant-Governor, a form of government which continued until 1911, when Bengal was restored under a Governor to her former rank as a Presidency. In 1857 the University was established In 1862 the Legislative Council of the Lieutenant-Governor was created, and in 1865-76 the municipal government of Calcutta was in the hands of Justices of Peace. The Chamber of Commerce dates from 1834, and the Port Trust Commission from 1870.

Numerically, Calcutta is, next to London, the largest city in the British Empire The population of the city and suburbs in 1941 was 2,108,891; and in Howrah 379,122. In Calcutta there are (in thousands) .—

Scheduled Castes	55
Hindus	1,476
Muslims	397
Indian Christians	16
Others.	63

The increase of a million since 1931 is due to factors other than natural, and the area has been changed. Early in the last century the population was about 200,000, and in 1850, 400,000 The first census was taken in 1872.

The Port of Calcutta is one of the leading ports in the East The site of Calcutta on the left bank of the Hooghly was originally selected for maritime trade, and it is doubtful whether, all things considered, a better site could have been found in this vicinity. The Hooghly carries to the sea the large volume of exports brought to Calcutta by the railways and river steamers; and by it enters the large volume of imports for an extensive hinterland The port proper extends from Konnagar, 9½ m N to Budge Budge (a subsidiary port dealing with petroleum), 13 m S, but the jurisdiction of the Conservators of the port approaches extends from Kalna, 60 m N, at the head of tidal action, down to the Eastern Channel Light Vessel, 126 m S, where the pilot vessel awaits ocean steamers

The navigation of the river between Calcutta and the sea is rendered difficult by shifting shoals and sandbanks: these necessitate the maintenance of large suction dredgers, an elaborate and scientific system of survey, and the service of skilled pilots in the Bengal Pilot Service

The trade of the Port fluctuates with world conditions. In 1901-2

(excluding inland vessels and coasting craft) 1347 vessels entered the Port; in 1929-30 the number was 3054. Calcutta enjoys a practical monopoly of Jute exports; other important commodities are shellac, tea and coal. The imports consist chiefly of cotton goods, oils and petrol, and miscellaneous goods of European manufacture, together with sugar from Java and rice and timber from Burma.

A passenger-steamer service, initiated by the Port Trust in 1907, has a fleet of thirteen vessels, which ply up and down the river from daylight to dark. Starting from Chandpal Ghat, near the High Court, a visitor can make an enjoyable trip down the river, or, starting from N. of the Howrah bridge, he can proceed about 7 m. up the river as far as Konnagar.

There are numerous moorings in the stream, thirteen river-side jetties and the Kidderpore Docks with thirty berths. The King George's Dock at Garden Reach (p. 119) provides for the largest vessels that can navigate the Hooghly.

The Port is administered by a body called the Calcutta Port Commissioners, consisting of a salaried Chairman and Deputy Chairman, and five nominated and twelve elected Commissioners, European and Indian, representing business interests and the railways. The Port Trust also administered the Howrah Floating Bridge.

There are about 250 factories and mills in and, chiefly, round Calcutta. They attract large numbers of labourers.

The civic administration is vested in the Corporation (1899), remodelled by an Act of the local Legislature, which came into force in April 1924, and again in 1939. The Corporation now consists of ninety-four Councillors, of whom ten are appointed by the local Government and the rest elected by the ratepayers, and certain public bodies, while five Aldermen are elected by the Councillors. At the head of the Corporation are a Mayor and Deputy-Mayor, who are elected for one year by the Councillors. The Corporation appoints, in addition to officers to whom particular duties are assigned, a Chief Executive Officer, to whom it delegates certain powers, duties or functions, under the Act. There are thirty-two general constituencies, in addition to which there is a representation of the commercial communities. The income of the Corporation exceeds 250 lakhs of rupees and there is a municipal debt of about 720 lakhs in the form of loans. The previous Corporation amply justified its existence. The Electric Supply Corporation (1896), Tramways, and Gas are examples. The elevated steel reservoir (1911) at Tallā, 2 m. N. of Calcutta, which gives the city a filtered supply, contains 9 million gallons, and stands 100 ft. high. Unfiltered water is taken from the river.

The further improvement and expansion of Calcutta was, by an Act of 1911 (amended in 1931), entrusted to a Board and a Chairman, with an income from a duty on transfers of immovable property, a terminal tax on passengers, a Customs duty on jute, and contributions from the Municipality and Government. The Improvement Trust has opened up congested areas, laid out or widened streets and provided open spaces. In Central Calcutta

a Central Avenue, now called Chittaranjan, after a former Mayor, C. R. Das, runs from Sham Bazar on the N. to Chowringhee Place on the S, a distance of two miles. Another wide road, running from the Circular Road on the E. to the river Hooghly on the W., and crossing Central Avenue near Beadon Street, is under construction. Open spaces include a park and playground in Shambazar, several smaller open spaces in various parts of the city, and two large parks, one in Cossipore, the other in the Karaya area. Russa Road, widened to 150 ft., gives a most pleasant drive from Chowringhee to Tollygunge. Extensive improvements have been made in the Bhowanipur area. A lake (Rowing Club) and park (Dhakuria) are complete, and the park has become a resort for riders and motorists. Model dwellings on a sufficiently large scale have been constructed to house people dispossessed of their homes by the operations of the Trust, and land has been acquired in the suburbs and is being laid out in plots for people desirous of building their own houses. A small improvement scheme has been begun in Burra Bazar, the principal Indian centre of trade and a seriously congested and insanitary area, but, owing to high land values, the cost is likely to be very heavy. The works now in progress show that the Trust is in a position to deal adequately with a problem which had become acute.

Calcutta, on alluvial soil at least 1250 thick, is the headquarters of the Government of the Presidency of Fort William in Bengal. The first Governor was Lord Carmichael of Skirling, who took over charge from Sir F. W. Duke, the last Lieutenant-Governor on 1st April 1912. The Earl of Ronaldshay (now Marquess of Zetland) held office from 1917 to 1922, the Earl of Lytton (1922-1927). Lord Brabourne (1937) died in 1939. The present Governor is H.E. Chakravarti Rajagopal Achari (1947).

The transfer of the capital from Calcutta to Delhi, and the creation of a Presidency of Bengal were announced by the King-Emperor at His Majesty's Darbar at Delhi on 12th December 1911, and, though this affected Calcutta to a certain extent, His Majesty, in replying to the Corporation's address in Calcutta, declared that it "must always remain the premier city of India". There is no room now for the Departments of the Govt. of India. There are few pleasanter places in the East during the cold-weather months (Nov. to February), all the amenities of civilisation such as air-conditioning are in use, and she is the home of a large European mercantile community.

Arrival in Calcutta

The terminus, at which the mail trains from Bombay, Delhi and Madras arrive, is at **Howrah**, on the right bank of the river Hooghly. This station is used both by the East Indian and the Bengal-Nagpur Railway systems. The river is crossed by a cantilever bridge (1500 ft.) which was opened in 1943, replacing a **Pontoon Bridge**, which was constructed by Sir Bradford Leslie in 1874 to last 25 years. The middle section was movable so as to admit of the passage of vessels up and down the river.

On the E. side of the bridge the **Strand Road** runs from N. to S. along the left bank of the river, the European residential quarter lying to the S.E. past the Esplanade. Direct access to **Sealdah Station**, the terminus of the Bengal Assam Railway system (for Darjeeling, Dacca, Chittagong, and Assam, Route 24) is afforded by the **Harrison Road**, which runs from the bridge E. to W through the heart of the purely Indian quarter. It was completed in 1892 and is named after Sir Henry Harrison, who was then official Chairman of the Corporation.

The Maidan and Quarters East and South.

The centre of Calcutta is the famous **Maidan** (plain, or park), bounded on the W. side by the Hooghly river and the Strand Road, and on the E. side by Chowringhi Road, it is nearly 2 m long, and is ¼ m. broad at its head, and 1¼ m broad at the S end, Tolly's Nullah. Government House, the residence of the Governor, faces it on the N, while Belvedere, where the Lieutenant-Governors of Bengal lived, and which is now occupied by the Viceroy on the occasion of his visits to Calcutta, is south of Tolly's Nullah. In the centre of the W side is Fort William, and on or near the E side are hotels, the United Service and Bengal Clubs, the Army and Navy Stores, the Indian Museum and the Cathedral, in the N.W corner are the Eden Gardens, and on the S., from W. to E., are the Race-course, the Military Station Hospital, the Presidency General Hospital, the Victoria Memorial and the Calcutta Club. The Red Road, once the fashionable evening resort, runs down the centre of the Maidan from N. to S., and joins Queen's Way, leading to the Victoria Memorial. The broad gravelled walk on the W. of the Red Road is called Secretary's Walk, and dates back to the year 1820. A "Respondentia" Walk was closed to velocipedes in 1840.

The **Eden Gardens**, for which Calcutta is indebted to the sisters of Lord Auckland (hence the Indian name, Lady Bagan), are beautifully laid out, and many years ago were the principal evening gathering-place of Calcutta society. In them is the ground of the Calcutta Cricket Club, and on the side of the miniature lake, a Burmese Pagoda brought from Prome (1856). Opposite the S W. gate is Theed's statue of Sir William Peel, the famous Commander of H.M.S *Shannon*, who served with his crew at Lucknow under Sir Colin Campbell (p. 435); and on the N. side are the statues of Lord Auckland (Weekes), Lord William Bentinck (Sir R Westmacott) and Lord Northbrook (Boehm), that of Lord Canning (Foley and Brock) is N.E. of the gardens. W of these, on the river-bank, are Babu Ghat (swimming-bath), and the Outram Landing Ghat, constructed by the Port Commissioners for passengers arriving and leaving by sea-going steamers A statue of King George V opposite Outram Ghat, by William McMillan, R.A, was unveiled by Lord Linlithgow

The old Chandpal Ghat was the official landing-place of the Governor-General and his Councillors, the Commander-in-Chief, and the Judges of the Supreme Court Here the first members of the Supreme Council sent from England, and Sir Elijah Impey and the Judges of the Supreme Court,

landed in October 1774. The practice continued for seventy years.

From Chandpal Ghat, Esplanade Road leads E., passing the High Court, the Town Hall, and Government House, and ending at Chowringhi Place, from which Chowringhi Road leads S. along the E. side of the *Maidan*, and Central Avenue leads to the N of the city. To the E. of Bentinck Street lies the Chinese quarter with a Chinese temple, but the visitor is not recommended to visit it without a suitable guide

The Supreme Court was converted to a High Court in 1861 and the cost is charged to Provincial Revenues.

The High Court was built in 1872 after the Cloth Hall at Ypres, with a tower 180 ft high An extension is connected by an over-bridge, and contains the Sessions Court The Chief Justice's Court is in the S W corner The Courts of Original Jurisdiction are at the S E corner In the E face is the Bar Library. The Attorneys' Library is in the E. corner, and here is a portrait of Mr Justice Norman, who was assassinated in 1871 on the steps of the Town Hall, in which Courts were then held

The following portraits may be seen. In the Judges' Library Sir W. Comer Petheram (C.J 1886-96, by C W. Furse), Sir Robert Chambers, one of the first judges and friend of Dr Johnson, (succeeded Impey as C J 1791-99, by Robert Home), Sir Lawrence Peel (C.J 1842-53, by Grant), Sir William Burroughs (J. 1806-15, by Sir T. Lawrence), Mr John Herbert Harington (J. 1801-7 and 1824-5), Sir Edward Ryan (J. 1827-33, C.J. 1833-43, by Sir M Shee), Sir H. Russell (J. 1797-1806, C J. 1806-13, by Chinnery), and Sir Charles Pontifex (J. 1872-82). In the Judges' luncheon-room: Sir Lawrence Jenkins (J. 1896-99, then C.J. Bombay, and C.J. 1908-16). In the Registrar's Room: Mr C. B. Trevor (J. 1856-67), Sir Robert Fulton (J. 1893-1908), Mr J. R Colvin (J. 1849-53)

In the C J.'s Court. Sir J. Anstruther (C.J 1797-1806, by Home), Sir Elijah Impey (C.J. 1774 and recalled 1783, by Zoffany), Sir R Garth (C.J 1875-86, by Hon John Collier) In the Fourth Court: Mr Justice Sambhu Nath Pandit (1863-67), the first Indian Judge In the old Sessions Court: Sir F. W Macnaghten (J 1815-25, by Chinnery) In the new Sessions Court Sir Elijah Impey (by Tilly Kettle)

At the head of the staircase is Chantrey's statue of Sir Edward Hyde East (C J 1813-21) In the public veranda are busts of Bengali lawyers Lord Sinha, by Lady Hilton Young, Sir Binod Mitter, by Percy Brown, Sir Rash Behari Ghose, by Pegram, R A, and Sir Romesh Chunder Mitter (by G Paul), first Indian to act as C.J. The records of the Court include the trial of Nuncomar, by Sir Elijah Impey with three other judges and a jury (on loan to the Victoria Memorial Collection). A view over the city can be had from the corner turrets.

At the head of Old Post-Office Street (the "Lincolns Inn" of Calcutta) is a fountain with a medallion portrait of Mr William Fraser MacDonell of the Bengal Civil Service (J. 1874-86), who won the Victoria Cross at Arrah in 1857 (see p. 60) and died in 1894.

The **Town Hall**, standing W. of Government House, was completed, as an inscription in English and Urdu on the S façade records, "under the Government of Lord Minto in the year of Christ 1813."

Its construction was determined upon by the inhabitants of Calcutta as early as 1804: and the cost was met by a lottery, which was announced in the following year "under the patronage and sanction" of Lord Wellesley, who was then Governor-General. The style is Doric, with a fine flight of steps leading to a portico on the S. The carriage entrance is to the N. under a portico

In the centre of the building is an upper hall, 172 ft long and 65 ft broad In the lower hall is a seated statue, by Gefiowski, of Maharaja Ramanath Tagore in the vestibule are busts of John Palmer (known as the "Prince of Merchants"), by Chantrey, and C. B Greenlaw (pioneer of steam communication with India), by Weekes.

The bust of H T Prinsep, the elder, is on the left-hand staircase, and the busts of Sir Henry Cotton (Armstead), Sir Proby Cautley (Steell) and Sir W. Casement, are in the upper lobby. Within the upper hall is a replica of Devis' famous picture of Warren Hastings.[1] The following pictures hang on the staircase and in the corridors Lady Lansdowne and Lady Dufferin, by J J Shannon, Lady Minto, by Laszlo, the ninth Lord Elgin, W W. Bird, Sir H M. Durand, General Hewett, Sir C. Allen and Sir H Harrison (Past Chairmen of the Corporation); Rev K. M. Banerjee, Sir Lawrence Peel and Sir Edward Ryan (C.Js of the Supreme Court), Bishops Wilson and Johnson, Sir Rivers Thompson, Sir W Grey and Sir E Baker (former Lt.-Govrs of Bengal), Sir H Ricketts, Gen Sir W. Nott, C. H Cameron (Macaulay's colleague), Sir Henry Norman (who refused the Viceroyalty in 1894) and a charming picture of Dr Wm. Twining, also of Sir Ashutosh Mukerji, High Court Judge and Vice-Chancellor of the University

[1] The original is now at Viceroy's House, New Delhi.

A **Council House**, to accommodate the Bengal Legislature, enlarged to two Houses, stands to the S. of the Town Hall, behind the statue of Lord William Bentinck and W of the statue of Lord Ronaldshay (Marquess of Zetland) A third statue, that of Mr E. S Montagu, by Lady Hilton Young, stands outside the entrance. Within the building are portraits of King Edward VII. and King George V., and of the first three Governors of Bengal (p. 106)

Government House, the official residence of the Governor of Bengal, is situated in a fine enclosure of 6 acres, standing back from the Maidan On the S are the statues of Lord Lawrence (Woolner), Lord Canning, and Sir H Hardinge (one of Foley's masterpieces), opposite which is the Cenotaph erected to the memory of citizens of Calcutta of British descent who fell in the war 1914-18.

Government House was begun in 1799 under Marquess Wellesley (the architect being Captain Charles Wyatt of the Bengal Engineers), and finished in 1802, the design being adapted in plan from that of Kedleston Hall, Derbyshire, built by Adam (1759-70) The *Dining-room* is of white chunam, with a floor of veined white marble On either side are six marble busts of the Cæsars, popularly, but erroneously, believed to have been taken from a French ship *c* 1809 The *Throne-room* is so called from its containing the Throne of Tipu Sultan. The art collection, which comprised many portraits of past Governor-Generals, has been distributed between the Viceroy's residences at Simla and Delhi

Above the dining-room and the adjoining rooms is a splendid ball-room. The floor is of polished teak, and the ceilings are beautifully panelled, after designs by Mr H. H Locke. The crystal chandeliers, of which many have been removed for use at Delhi, were bought in 1801 at the sale of General Claude Martin's effects at Lucknow (p 456).

On the N. side of Government House is a fine brass 32-pounder, taken at Aliwal, and inscribed in Gurmukhi On either side is a 6-pounder brass tiger-gun, taken from Tipu Sultan There are also two large brass guns inscribed "Miani, 17th February" and "Hyderabad, 30th of March 1843", and another with a carriage representing a dragon, which is a trophy of the peace of Pekin, 1842.

At the corner of Old Court House Street and Esplanade East is Esplanade Mansions. next, the Locke Buildings (Walter Locke & Co.), and the premises of Messrs Thacker, Spink & Co Nearer Dhurrumtolla is a fine block of Government Offices, in which the **Imperial Library** is located. tickets of admission to the Reading Room are freely granted to adults

At Chowringhi Square is the *Statesman* newspaper office, also a mosque erected by Prince Ghulam Muhammad, son of Tipu Sultan (killed 1799), in gratitude to God, and in commemoration of the Honourable Court of Directors granting him the arrears of his stipend in 1840.

N. of the Maidan are the Curzon Gardens, with the tramway terminus on the E. The **Ochterlony Monument** on the S is a *column* 152 ft. high, raised in 1828 in honour of *Sir David Ochterlony*, who brought the Nepal war (1814-16) to a successful conclusion, and was afterwards Resident in Malwa and Rajputana. From the galleries a fine view over Calcutta is obtained.

At the head of Chowringhi Road are the premises of Messrs Whiteaway, Laidlaw & Co., the Y.M C.A., and the Grand Hotel, and in Chowringhi Road is the Indian Museum In front of the Museum on the Maidan side is the Monohar Das Tank (excavated at the cost of a Benares banker in 1793) and further to the N. at a junction of roads, T Thorneycroft's statue of Lord Mayo (Viceroy, 1869; assassinated 1872).

At the junction of Surendranath Banerji Road and Corporation Street, the Municipal offices contain a Council Chamber fashioned after the Chamber of Deputies in Paris The Sir Stuart Hogg Market, the Empire Theatre, the Elphinstone Picture Palace are all in this quarter. Beyond, on Wellesley Street (which with Wellington, College, and Cornwallis Streets forms a second great thoroughfare from S to N.) stands the Calcutta Madrasa, a Muslim College founded by Warren Hastings in 1780.

The **Indian Museum** (1875), 300 ft. long (known to Indians as the Jadu Garh, or house of magic), stands at the corner of Chowringhi and Sudder Street. The entrance is from Chowringhi Road by a pillared vestibule, in which are installed the lion and bull capitals of the column of Asoka (274-237 B.C.) from Rampurwa (N Bihar) and Sarnath (cast), the Wishing Tree from Besnagar and colossal archaic male and female figure from Patna, Besnagar and Muttra (cast). *On the ground floor a quadrangle has a colonnade in Italian style and surrounds an open turfed space The N. side of

the colonnade is occupied by *Geological Galleries* (the Mineral and Meteorite Galleries), the E. side by a *Zoological Gallery* (the Invertebrate Gallery) and the S side by *Archæological Galleries* (the Gupta Asoka, and Inscription Galleries).

Another Archæological Gallery (that of the *Bharhut Stupa*) runs from the vestibule on the right, and a Geological Gallery (that of the *Siwalik Fossils*) to the left. The Bharhut Stupa Gallery leads to the *Indo-Scythian Gallery*, which has another extensive gallery on its S., devoted also to archæology, and surrounded by a hanging balcony at the S end The N E corner room in the ground floor of the main building is the *Insect Gallery*, which leads by a bridge to the first storey of the Sudder Street Block, in which is the *Ethnographical Gallery*.

The Sudder Street block houses also a library, herbarium, laboratory and offices of the Industrial and Botanical Sections.

In the centre of the landing on the First Floor stands a marble statue of Empress Victoria. Behind it is the entrance to the *Library of the Zoological Survey of India*. N and S. from the library extend galleries in which *Zoological Collections* are stored for purposes of research. (Admission obtainable through the Director, Zoological Survey of India) On the N. side is a gallery containing *Fossils*; in the N E corner room is the *Small Mammal Gallery*, from which a bridge extends to the *Industrial Gallery* in the second storey of the Sudder Street Block The *Large Mammal Gallery* occupies the E. side, and contains an albino tiger At the S. end are the *Bird and Reptile* and the *Fish Galleries*.

On the first floor of the New Wing, allotted to the *Art Section* and entered from the Fish Gallery, is the *Artware Court*, where art collections are shown in three main classes—(1) textiles, (2) metal-wood, ceramic, etc., and (3) pictures

The Second Floor extends along the whole length of the W side of the Main Building and the New Wing. There is a large public lecture-hall on this floor, the rest of which is devoted to laboratories of the Zoological and Anthropological Section, and offices. A large gallery in this, at the S. end, is in the occupation of the Art Section

The E block (three floors) houses the library of the Geological Survey of India, the exhibits of the Section being shown in four galleries in the Main Buildings Complete Catalogues of the various Sections are obtainable

To the south of the entrance vestibule, in the Bharhut Gallery, have been reconstructed parts of the great railing round the stupa of Bharhut in Nagod State in Central India, with original stones brought from the site. These stones bear bas-reliefs that illustrate scenes from the pre-births (jatakas) and the last birth of Gautama Buddha, with labels in ancient characters There are also some carved stones of the old railing round the Bodhi tree at Bodh-Gaya, casts of friezes in the ancient caves of Orissa, and casts of some of the ancient bas-reliefs of Sanchi. These sculptures date from the second to the first century B C

In the room to the south of the Bharhut Gallery are displayed Græco-Buddhist sculptures from Gandhara (Peshawar District), a few dating from the first century A.D. To the east of the Gandhara room in the Gupta Gallery

are exhibited sculptures from the stupa of Amaravati (destroyed, but its appearance can be judged from a bas relief) from Sarnath of the Gupta period and later mediæval sculptures from Bihar, Bengal, Orissa, Southern India, Java and Cambodia In the room east of the Gupta Gallery are displayed Sanskrit, Arabic and Persian inscriptions

On the ground floor of the New Wing, to the south of the Gandhara Room, in the New Hall are miscellaneous antiquities On the walls of the southern balcony of the New Hall are displayed casts of the edicts of Asoka Adjoining the balcony is the strong room, with an extensive and magnificent collection of Indian coins Architectural pieces are exhibited in the eastern veranda of the main quadrangle and additional specimens of later mediæval Buddhist and Brahmanic sculptures from Bihar and Orissa in the southern veranda

The Siwalik Fossil Remains (Ground Floor) include the Hyænarctos or Hyæna-Bear, the Amphicyon, a dog-like animal as large as the Polar bear, the Machairodus or Sabre-tooth tiger, whose canine teeth were 7 in. long: also the Siwalik cat, which was at least as large as a tiger. There is the skeleton of an elephant 11 ft high. Amongst Siwalik birds are the shank-bone and the breast-bone of a wading-bird as big as an ostrich (Megaloscelornis) and these bones are the only ones belonging to this species existing in the world. The Museum is particularly rich in fossil remains of the elephant, hippopotamus, rhinoceros, giraffe and pig, and contains interesting remains of Siwalik apes. The remains of the Crocodilus crassidens are those of an extinct species of enormous dimensions. There is also a specimen of the Siwalik Colossochelys, a gigantic tortoise of prodigious size. Whereas the species and many of the genera of the Siwalik Mammals and Birds are entirely different from those inhabiting the earth, all the genera of the Reptiles have living representatives in India The Collection of the Fossil Vertebrata of the Siwaliks is the most complete and comprehensive in the world.

The upper Palæontological Gallery contains remains of the Invertebrates and Plants from the stratified rocks of the Indian Empire, which range from the Cambrian to the Tertiary period, and also large collections of fossils from foreign countries. Amongst the Indian specimens the following are worthy of special attention the magnificent collection of Gondwana plants, the fossils from the Productus Limestone of the Salt Range, the South Indian cretaceous and the various fossiliferous rocks of the Himalayas and Burma

In the Geological Section, the collection of zeolites, and that of meteorites, of which over 400 falls are represented, are among the finest in the world.

The adjoining **Economic Galleries** contain indigenous manufactures. The Indian museum is visited by over half a million of persons annually. To the S. is the Bengal School of Art, part of which is in the Sudder block

At the corner of Chowringhi and Kyd Street is the United Service Club House, founded as the Bengal Military Club in 1845, and membership extended 1853. Just beyond it, at the corner of Park Street, is the **Royal Asiatic Society of Bengal.** This institution was established in 1784 as the Asiatic Society by Sir William Jones, and led to the foundation of the Royal Asiatic Society in London by H. T. Colebrooke. Visitors can be elected members The

Asiatick Researches (the k was dropped in 1825) began to be issued in 1788, and continued to be published until 1839. The *Journal* began in 1832, under the auspices of Professor H. H. Wilson and James Prinsep, who added the words, "*of* Bengal," and first deciphered the Brahmi rock and pillar inscriptions of King Asoka. From 1832 to 1839 both publications were issued. The library contains over 15,000 volumes, and there is a large collection of valuable coins, copper plates, pictures, and busts. The bulk of the Arabic and Persian MSS. formed part of Tipu Sultan's Library; and there are also MSS. in Sanskrit, Burmese, Nepalese and Tibetan. The pictures include portraits of Warren Hastings, by Tilly Kettle, and of Sir William Jones as a boy, by Sir Joshua Reynolds.

In Middleton Row, turning off Park Street, are **St. Thomas's Roman Catholic Church**, commenced in 1841, and the Convent of Our Lady of Loretto (once the residence of Sir Elijah Impey). The E.I. Ry. offices used to be in Park Street.

Near the E. end of Park Street, on the right, is **St. Xavier's College**, with a fine science laboratory and astronomical observatory. In one of the old **cemeteries** (remarkable tombs) on the S. side at the end of Park Street is buried Landor's Rose Aylmer (died 1800), the grave is marked by a column spirally fluted. Here also lie Lucia, the wife of Robert Palk, idyllised by Mr. Rudyard Kipling, Sir John Clavering, Colonel and Lady Anne Monson, Sir William Jones, Lemaistre and Hyde (two of the judges who condemned Nuncomar), Charlotte Barry, the mistress of William Hickey (the writer of the naïve *Memoirs*), and Augustus Cleveland (p. 462). These tombs are mostly in the corner formed by the junction of Park Street and Rawdon Street. In N. Park Street Cemetery, opposite, is the grave of W. M. Thackeray's father, who died 1815. Thackeray was born in 1811.

In front of the W. end of Park Street, facing the Maidan, is the spirited equestrian statue of Sir James Outram (by J. H. Foley) and farther on, facing the E. approaches to Fort William, that of Lord Dufferin (by Sir E. Boehm), N. of which, on the Red Road, are the statues of Lord Roberts (by Harry Bates),[1] Lord Kitchener, Lord Ripon (by Derwent Wood), Lord Minto (Goscombe John), and Lord Lansdowne (by Bates and Onslow Ford).

Chowringhi Road, the old residential quarter *par excellence* of Calcutta Society,[2] continues south, past the Bengal Club (founded 1825, and occupying the site on which Lord Macaulay once lived), to St. Paul's Cathedral.

At the extreme S.E. of the Maidan is **St. Paul's Cathedral**, which was designed by Major W. N. Forbes, Bengal Engrs., commenced in 1839, and opened in 1847; it is 240 ft. long and 80 ft. broad, and the spire was 200 ft. high. In the vestry of the Cathedral is a large folio MS. volume entitled "History of the erection of St. Paul's Cathedral," which contains a plan of the Cathedral at p. 265. Over the porch is a library, left to the public by Bishop Daniel Wilson, with an excellent bust of him.

[1] A replica of this statue has been erected on the Horse Guards Parade in London.

[2] It was from the spacious houses in Chowringhi that Calcutta obtained its name of "The City of Palaces."

The great west window, designed by Sir E. Burne-Jones, was erected in 1880 by the Government of India as a memorial to Lord Mayo. The original East window was given by the Dean and Chapter of Windsor, to whom it was presented as a gift by George III. for St George's Chapel One S. window is a memorial to Bishop Milman (1867-76). The Communion Plate was given by Queen Victoria. The handsome episcopal throne is a memorial to Bishop Johnson (1876-98). The grave of Bishop Wilson is on the N side of the sanctuary.

On the left side of the vestibule is a black marble tablet to sixteen officers of the Bengal Engineers, who fell during the Indian Mutiny in the years 1857-58. It is ornamented with a relief representing the blowing up of the Kashmir Gate, Delhi, by Lieutenants Salkeld and Home (p 288). Next is a tablet to fifteen officers who fell in the Bhutan campaign and a monument in memory of John Paxton Norman, officiating Chief Justice of Bengal, assassinated on the steps of the Town Hall when entering the High Court (then located there) on 20th September 1871 Beyond is a tablet to seven officers of the 68th Bengal Infantry "who died during the Mutiny of the Native Troops, and subsequent operations, from 1857 to 1859, some on the field of battle, some by the hands of their own followers, others from disease — all doing their duty."

Then follows a tablet to William Ritchie, of the Calcutta Bar and Inner Temple, who died in 1862, a member of the Council of the Governor-General, the inscription by W. M. Thackeray, who was a cousin of Mr Ritchie. On the left is a tablet to Sir Henry Lawrence, adorned with a medallion portrait in white marble. In the left wall of the passage from the vestibule is a monument to the eighth Lord Elgin, who died at Dharmsala in 1863 while Viceroy. The inscription on the memorial tablet to Patrick Vans Agnew of the Bengal Civil Service, and Lieut. Anderson of the Bombay Fusiliers, murdered at Multan in 1848, was composed by Macaulay. In the centre of the transept is a statue of Heber, the second Bishop (1823-26), by *Chantrey*

Among comparatively recent memorials is one of Sir John Woodburn, Lieutenant-Governor of Bengal (1898-1902), and another erected by Lord Curzon (who wrote both the inscription and the verse) to the members of Lumsden's Horse who fell in the S. African War The organ is one of the finest ever made by Messrs Willis.

The upper part of the steeple fell during the great earthquake of 12th June 1897, but was restored. After another earthquake, in 1934, it was rebuilt on the design of Bell Harry Tower at Canterbury and dedicated 1938.

Ashutosh Mukharji Road leads through Bhowanipur to the suburb of Tollygunge (4 m from Government House). This is the old "pilgrim's path" to Kalighat. The European community frequents the Gymkhana Club and the Royal Calcutta Golf Club (started 1829). Ruins of the palaces once occupied by the eleven sons of Tippoo Sultan are in this suburb.

On the Lower Circular Road, running E and leading to Ballygunge, are Bishop Middleton's College (1823) and the Martinière Schools. The Lower Circular Road turns N., and in the cemetery (1840) at the corner of Park Street (on the right-hand side) are buried Sir Wm. Macnaghten, murdered in Kabul; James Wilson, the financier; Justice Norman; and Sir John

Woodburn. Cemeteries in Park Street date from 1767 and 1796 (on the W. side).

Kalighat, celebrated as the site of a temple in honour of the goddess Kali, the wife of Siva, lies about 1¼ m. S. of the Cathedral, by a long detour, on the bank of Tolly's Nulla, an old bed of the Ganges cleared out by Major Tully in 1775.

The place, after which Calcutta is named, derives sanctity from the legend that when the corpse of Siva's wife was cut in pieces by order of the gods, and chopped up by the disc (*sudarsan chakra*) of Vishnu, one of her fingers fell on this spot. The original temple is supposed to have been built 350 years ago. A member of the Sabarna Chaudhury family of Barisal, who at one time owned estates in this part, built the temple, and allotted 194 acres of land for its maintenance. A man of the name of Chandibar was the first priest appointed to manage the affairs of the temple. His descendants have taken the title of Haldar, and are proprietors. The principal religious festival of the year is on the second day of the Durgapuja, in October.

The **Victoria Memorial** must be visited (main entrance from Queensway). It dominates southern Calcutta. To Lord Curzon its conception is due, to show a collection illustrative of Indian history and especially of that of the Victorian era. The funds were voluntarily subscribed by the Princes and Peoples of India. The architect was Sir William Emerson, and the work was entrusted to Messrs Martin & Co. of Calcutta, who executed it, with considerable difficulty in the foundations, under the supervision of Mr V. J. Esch, C.V.O., the Superintending Architect. His Imperial Majesty King George V., when Prince of Wales, laid the foundation-stone on the 4th January 1906; the Duke of Windsor, as Prince of Wales, on the 28th December 1921, opened the building. The design is chiefly Renaissance with traces of Saracenic influence. The facing is of polished marble quarried at Makrana in the State of Jodhpur. The groups of statuary over the entrance porches and figures surrounding the dome were designed and executed in Italy.

The figure of Victory, standing 16 ft. high and weighing 3 tons, surmounts the dome, and revolves upon its base, a sphere 2 ft. in diameter. From the ground-level to the base of the figure is 182 ft. The dimensions of the hall itself at the corner towers are 339 ft. by 228 ft.

The entrance is on the N. past a bronze statue of Queen Victoria by Sir George Frampton, R.A., which is flanked by two tanks, the surroundings of the statue and the gates were designed by Mr Esch. On either side of the bridge on which the statue stands and also on either side of the portico are finely-executed bronze reliefs by Sir W. Goscombe John, R.A., which were originally intended for the pedestal of the statue of Lord Minto on the Red Road. In the lobby the visitor will find bronze busts of King Edward VII. and of Queen Alexandra and marble statues of King George V. (Mackennal) and of Queen Mary (Frampton). The busts, which are by Sydney March, were presented

by King George V., and the statues were presented by H.H. The Aga Khan. A model of the Memorial shows the complete design with the corner towers surmounted by cupolas, which have yet to be erected. The antique clock is a fine specimen by Whitehurst of Derby (F R S, 1713-1788).

To the right, in the Royal Gallery, is a collection of paintings representing events in the life of Queen Victoria, the gift of King Edward VII. Queen Victoria's piano and writing-desk occupy the centre of the room, while on the south wall hangs Verestchagin's masterpiece, depicting the State entry of King Edward VII. when Prince of Wales into Jaipur in 1876. This exhibit, which was presented by the Maharaja of Jaipur, should on no account be missed

On the opposite side of the entrance hall a collection of Persian books will be of interest to the antiquarian, and among the pictures on the walls will be found portraits of Holwell (by Reynolds), of Lord Clive (after Dance, R A), of the King of Oude and the Nawab of Arcot, both presented by King George V., of Dwarka Nath Tagore (1795-1846), a Bengal notable whose enlightenment was in advance of his time, of Sir Henry Rawlinson (1810-1894), and of Lord Lake (1744-1808). A portrait by Reynolds of Major-General Stringer Lawrence (1697-1775), the "Father of the Indian Army," was bequeathed by Lord Curzon. The statues in the corners are of Lord Wellesley and of Lord Dalhousie; and between them has been placed Flaxman's statue of the Marquess of Hastings (Lord Moira), which stood for many years in the portico of the Dalhousie Institute

Passing through the Queen's vestibule into the Queen's Hall under the dome, one sees the dignified statue of Queen Victoria at the age when she ascended the throne (the work of Sir Thomas Brock, R A); this gives the keynote to the whole edifice On the marble panels in the recesses of the walls are engraved in several languages proclamations to the people of India by Queen Victoria, while the mural paintings encircling the gallery (by Frank Salisbury) illustrate the principal events of her lifetime. These will be better seen across the hall from the gallery itself

The bronze doors on the two sides of the Queen's Hall are fine examples of modern workmanship, and beyond them on the terraces are groups of marble statuary, with Lord Cornwallis, by John Bacon, junior, as the central figure of the one (on the east) and Warren Hastings, by Sir Richard Westmacott, as the central figure of the other (on the west)

Continuing through the building we come to the Prince's Hall The marble statue of Lord Clive, by Tweed, a replica of the one in bronze which stands outside the India Office in London, and two French guns captured at the Battle of Plassey, together with a number of busts of distinguished men, are the principal objects on view.

On the left is the Darbar Hall The First World War (1914-18) enforced economy, but the change from marble to Chunar stone enhances the general effect. On either side of the entrance are hung framed colours of the famous Bengal European Fusiliers which fought in every battle in Upper India from Plassey until the storming of Delhi in 1857. The art exhibits comprise Miss Eden's water-colour sketches, Atkinson's mutiny drawings, Daniell's Twelve views of Calcutta in 1786-88, miniatures on ivory, engravings, and a fine collection of Oriental paintings. Philatelists will be shown the stamp collection

At the end of the Darbar Hall is the historic black stone *masnad*, or throne, of the Nawabs Nazim of Bengal, Bihar and Orissa, 6 ft. in diameter and 18 in. high, the whole, including the four pedestals, has been hewn out of one block. The Persian inscription cut round the edge records that it was made at Monghyr in the year 1052 of the Hegira (1641 A.D.). It belongs, therefore, to the time of Sultan Shujah, second son of the Emperor Shah Jahan, who was Subadar of Bengal from 1639 to 1647, and must originally have been kept at Rajmahal (p. 461), whence it followed the Nawabs to Dacca and Murshidabad (p 468) It was upon this throne (which was presented in 1904 by the Nawab Bahadur of Murshidabad) that Clive installed Mir Jafir after the Battle of Plassey (1757), and saluted him as lawful Nawab, and in 1765 he sat upon it side by side with the then Nawab Nazim and proclaimed the assumption of the Dewani (civil administration) by the E.I. Company.

Across the Prince's Hall is one of the Picture Galleries, containing pictures and engravings of Indian scenery by Thomas Daniell (1749-1840, R.A), and his nephew William (1769-1837, R A) Among these is a collection of aquatints presented by Queen Mary Other paintings include portraits of Sir Elijah Impey by Tilly Kettle (a variant of the one at the High Court), Abu Taleb Khan by Northcote, Rudyard Kipling by Burne-Jones, Burke and Macaulay. "The Embassy of Hyder Beck," the "Tiger Hunt near Chandernagore," "Claude Martin and his Friends," and "Lord Cornwallis receiving the son of Tippoo Sahib," by Zoffany, are in a room beyond In the room between is the Lyell collection of Indian landscapes by the Daniells (presented in 1932), among them being a beautiful view of the Taj Mahal at Agra (p. 261).

In the Picture Gallery on the first floor a collection of paintings includes a portrait of Warren Hastings and his wife in a group, a very fine one of Mrs Hastings (both by Zoffany), and two portraits of the great Governor-General in his old age, one by Lemuel Abbott, one attributed to Hoppner. The centre room contains a large collection of engravings, while in the "Calcutta" room at the end will be found a comprehensive series of prints of old Calcutta and a model of Fort William Two fine oil paintings by Thomas Daniell represent Old Court House Street in 1786 and the river front opposite the old Fort William

Among the historic documents in the annexe is the original indictment of Nuncomar for forgery of a bond, which is also on view in original (see High Court)

A tour of the Gallery round the interior of the dome should be made to view the mural decorations and those who wish to do so may ascend to the top of the dome As the door leading to the dome is kept locked, application should be made to the Superintendent at his office in the entrance hall The echo in the space between the outer and inner domes and the whispering gallery inside the circumference of the dome, are both remarkable instances of these phenomena. If time permits, a visit should be paid to the upper galleries. A magnificent view of the Maidan can be had from the balcony over the main entrance

The southern entrance is formed by a lofty arch surmounted by an equestrian statue of King Edward VII. by Mackennal, R.A A second statue of Lord Curzon is by Pomeroy, R.A. Between this and the arch is a naval 4.7" gun, which was captured by the Turks at Kut and subsequently retaken.

The Memorial [1] is open on Sundays and week-days (excluding Mondays) from 10 A.M. to 5 P.M. On Fridays there is a charge of 8 annas, which admits to the whole building. On other days entrance is free, but a charge of 4 annas is made to view a part of the collections. On Mondays the building is closed.

On the Lower Circular Road, S. of the Victoria Memorial, is the **Presidency General Hospital** (1768), open to Europeans of all classes. A large block for paying patients is known as the Woodburn Ward, and Lytton House, which was opened in 1925, accommodates the nursing staff. The Station Hospital for British soldiers, conspicuous by its pillared frontage, was (1773) the Court House of the Sadar Diwani Adalat, the chief provincial Court of Appeal, which ceased to exist on the establishment of the High Court in 1862. The Police Training School was Dullanda House

The 'Alipur Road, crossing Tolly's Nulla by the Zeerut bridge, leads to the **Zoological Gardens**, inaugurated on 1st January 1876 by King Edward VII. (then Prince of Wales). They comprise an area of 40 acres attractively laid out, and a large collection of animals in houses. The Reptile House usually contains a King Cobra Special attention should be given to the southern extensions, where birds, deer and cattle are grouped under natural conditions. In an island enclosure, in the centre of the gardens, about 100 yds. along the broad pathway from the main entrance, gibbons and orang-outangs may be seen in practically a wild state. On the S. side of the gardens is the 'Alipur Observatory, of the Meteorological Department, on whose predictions the attacks on Mount Everest depend.

Belvedere House, transferred (1912) from the Lieutenant-Governors of Bengal, is now only used by the Viceroy on the occasions of his visits to Calcutta. The grounds are open to the public when the Viceroy is not in residence. At a spot W. of the entrance of Belvedere, on the 'Alipur Road, was fought, on 17th August 1780, the duel between Warren Hastings and Sir Philip Francis, in which the latter was wounded S of Belvedere are the Royal Agri-Horticultural Gardens (1872), managed by a Society which was founded in 1820 Off Judge's Court Road stands Warren Hastings' private residence, known as "Hastings House" It was used for a time as a Guest House for Indian Princes 'Alipur is a large residential suburb and H.Q. of the 24 Parganas (Clive's jagir).

The **Race-course** (1 m 58 yds 5 ft.) under the Royal Calcutta Turf Club, is one of the most famous in India The Christmas race meeting, at which the King-Emperor's Cup and the Viceroy's Cup are run for, is one of the principal social events of the winter season in Calcutta Besides the public stands, there is a members' stand, admission to which can only be secured upon an introduction by a member of the Club. The bridge S.W. of the Race-course, across Tolly's Nulla, leads to Watgunge, so called after Colonel Henry Watson (Francis' second in the duel with Hastings), who in 1780 established wet an

[1] *The Curator (office on first floor) should be consulted regarding any rearrangement of exhibits. Enquiries may also be addressed to the Superintendent, whose office is on the right of the entrance hall.*

dry docks here. The docks were afterwards owned by the two East Indian sons of Colonel Kyd, who is supposed to have given his name to the adjoining Dockyard. Between 1781 and 1821 ships were built at these Docks, and in 1818 the *Hastings*, a 74-gun ship, was launched there In Kidderpore is St Stephen's Church, and close by was the Military Orphan Asylum, in the mansion of Hastings' colleague, Richard Barwell

The last bridge across Tolly's Nulla (Govindpur Creek), Hastings Bridge, leads past the Government Dockyard and the Kidderpore Docks (1892) with 28 berths, to **Garden Reach**, once known for its palatial suburban residences, and the home of the last of the Kings of Oudh, Wajid Ali, who was deposed in 1854, and survived his deposition by more than thirty years. On the way are passed the offices of the Bengal-Nagpur Ry. The **King George's Dock**, which was opened by the Viceroy, Lord Irwin, on 28th December 1928, covers a water area of 190 acres, with a depth of 36 ft., and is equipped with six berths and five riverside berths (1924). Alongside the entrance lock (700 ft by 90 ft.) are two graving docks The full scheme contemplates 34 berths in the Dock

At the W. extremity of Garden Reach was the fort of 'Aligarh, and opposite to it, on the other bank of the river, the fort of Tanna, both of which were taken by Clive in the recapture of Calcutta in 1756-7.

On the Strand Road is Cooly Bazar, near the site of which Nuncomar was hanged for the offence of forgery on 5th August 1775, near a boundary mark of Govindpur

In front of St. George's Gate of Fort William (S.W. corner) is a statue of Lord Napier of Magdala (replica in Queen's Gate, London) opposite **Prinsep's Ghat**, which, now some distance inland since the reclamation of the foreshore, is marked by a pavilion of stone, supported by pillars, and inscribed "James Prinsep," in memory of the great Oriental scholar, who died in 1840. King George V landed here in 1912. A short distance S. of Prinsep's Ghat stands the memorial to the Indian Lascars of Bengal and Assam, who lost their lives in the Great War through enemy action. Farther N., and opposite the Water Gate of the Fort, is the Gwalior Monument, erected by Lord Ellenborough in 1844, in memory of the officers and men who fell at Maharajpur and Pannar in 1843, and designed by Col W H Goodwyn, Beng Eng. It is of brick faced with Jaipur marble surmounted by a metal cupola made from guns taken from the enemy In the centre the names are engraved on a sarcophagus

The first **Fort William** received its name from William III. The site was changed in 1757, from that now occupied by the Post-Office to the river-bank farther S., where Clive commenced a new fortress, which was finished in 1781 and has never been attacked. It is an irregular octagon, enclosing an area of 2 sq. m., of which five sides look landward and three on the river, and is surrounded by a fosse 30 ft deep and 50 ft. broad, which can be filled from the river. There are six gates—Chowringhi, Plassey, Calcutta, Water Gate, St George's and Treasury Gate There is also a sally port between Water and St George's Gates Inside

the Chowringhi Gate (S.E.), past the Governor's residence, now used as a Soldiers' Institute and Garrison School, is the Fort Church of St Peter (1828), in the centre. The Catholic Chapel, St Patrick's, was built in 1857. *The Military Prison* behind this is built on a massive storehouse, on which is an inscription relating to the amount of rice and grain deposited there by the authorities in 1782. Over the Treasury Gate are *rooms once the residence of the* Commander-in-Chief, and occupied by Lord Roberts and Lord Kitchener, who constructed the ramp which leads up to it, and laid down the marble floor. The *Arsenal* is worth a visit, for which permission must be obtained from the officer commanding the Fort (residence, Chowringhi Gate). Many of the guns were captured in the Sikh Wars (originally 256 in number).

Quarters, Government House, and Dalhousie Square

This part was developed about 1775. To the N. of Government House are three streets, Old Court House on the E., Wellesley Place in the centre, and Council House Street on the W. These lead to **Dalhousie Square**,[1] with a garden and tank in the middle. In Wellesley Place is the **Central Telegraph Office** (on the E. side).

From Council House Street Hastings Street leads towards the river on the line of the Khal Kata Creek, which ran by Wellington Square and Creek Row to Beliaghata and the Salt Lakes, forming the N. boundary of Govindpur.

A tablet on the wall of No. 7 Hastings Street records that the house was the residence of Mrs Warren Hastings. Two finely-painted punkha boards, upon which a hunting scene with elephants is represented, were long preserved here and are now in the Durbar Hall at the Victoria Memorial (p. 115).

The **Church of St John**, first a Chapel, became the Cathedral in 1815. In the N. veranda is the *Tomb of Lady Canning*, brought from Barrackpore Park, where it was originally erected over the grave in 1861. Outside the Church, to the N. of the W. entrance, is a domed pavilion about 50 ft. high with twelve pillars. The inscription bears the names of fourteen officers who fell in October 1794 during the second Rohilla War. A silver plaque in the church placed by the 2nd Dorset Regiment records the presence of men of the 39th Foot at Plassey.

The church, which was begun in 1784 (the funds were raised by a lottery) and opened in 1787, is 136 ft. long and 70 ft. wide. It is designed on the lines of St Stephen's Church, Walbrook. The main entrance, which was at the E. end, has been blocked up, although the original portico and ramp for the use of palanquins has been retained. Access to the building is obtained through an iron gate in Council House Street.

The South aisle has on the left a picture of the Last Supper (once the altar-piece), painted and presented to the church by Johann Zoffany (1733-1810), in which the Apostles are all portraits of contemporary inhabitants of Calcutta. In the E. end of the nave is the grave of Bishop Middleton, first Bishop of Calcutta (d. 1822), and among the many fine memorials are those of Colonel James Achilles Kirkpatrick, Resident at Hyderabad from 1798 to 1805, Alexander

[1] This was formerly known as the Lal Bagh, and the tank (1712) is still known as the Lal (red) Dighi.

Colvin, John Adam (officiating Governor-General, 1823), and others.

In the N.W. corner of the graveyard is the large octagonal mausoleum of Job Charnock, the founder of Calcutta, 24th August 1690, who died on 10th January 1692 according to the Latin inscription. In this has been placed the slab which covered the grave of Surgeon William Hamilton, who in 1717, having cured the Emperor Farrukhsiyar, obtained for the E.I. Company the right of importing their goods free of duty, and other great privileges. (Persian inscription)

A few yards to the S. is the tomb of Admiral Charles Watson, who, with Clive, retook Calcutta (died 16th August 1757) It has a large square base, supporting an obelisk, inscribed to his memory. Close by is the tomb of "Billy Speke," a midshipman on the Admiral's flagship, the *Kent*, who "lost his leg and his life" at the capture of Chandernagore (Fort Orleans) on 24th March 1757. The graves of Bishop Turner (1831) and of three Judges—Sir R. H. Blosset (1823), Sir Christopher Puller (1824), and Sir Benjamin Malkin (1837), the friend of Macaulay—are placed side by side within a railing. A dome covers the grave of "Begum" Johnson, the grandmother of the first Earl of Liverpool (Prime Minister from 1812 to 1827). She was taken prisoner by Suraj-ud-Daula in 1756 and died in Calcutta in 1812 at the age of eighty-seven. Lord Brabourne was buried here (1939).

At the junction of Council House Street and Hare Street is a building partly occupied by the Commerce and Industry Department of the Government of India. A Commercial Museum is located here on the first floor (entrance by S. staircase); and there is a Library and Reading-Room attached to the Commercial Intelligence Department of the Government of India.

The Court of the Presidency Magistrate is beyond Hare street, which passes the Small Cause Court, to the **Metcalfe Hall**, founded in honour of Sir Charles Metcalfe by public subscription, and built 1840-44. The design is copied from the portico of the Temple of the Winds at Athens. A Public Library was in 1903 converted into an Imperial Library at the instance of Lord Curzon, and was removed in 1924 to the Esplanade.

On the Strand Road, N. of this, are the Sailors' and Indian Seamen's Homes and the offices of the Port Trust, at the corner of Koilaghat Street (on the S. side of which are the offices of the Bengal-Assam Railway). Extending about ½ m. are Import jetties. Beyond the Cantilever bridge is the Silver Mint, which was built 1824-31, the architect being Major W. N. Forbes. The style is Doric, the portico being copied (half-size) from the Parthenon at Athens. A Copper Mint was added in 1865. The Mint Master issues passes to view on application.

Dalhousie Square.

Within Dalhousie Square are the statues of four Lieutenant-Governors of Bengal—Sir Steuart Bayley, Sir A. Eden, Sir Andrew Fraser, and Sir J. Woodburn—of the Maharaja of Darbhanga (by Onslow Ford), and of Sir Rajendranath Banerji (W. side).

The **Dalhousie Institute** was built "to contain within its walls statues and busts of great men." These have been transferred to the

Victoria Memorial Hall, and the building is used by the Calcutta Trades Association (1830). The foundation-stone was laid in 1865, but the entrance portico preceded it, having been built in 1824 for the statue of the Marquess of Hastings, which is now in the Victoria Memorial Hall and has been replaced by a statue of the Rt. Hon. James Wilson, the financier, which was formerly inside the building The hall is lined with marble, and measures 90 ft. by 45 ft

On the W. side is the domed **General Post Office,** occupying part of the site of the Old Fort It occupies an area of 103,100 sq ft. The reinforced concrete dome at the S E corner is over 220 ft. high The first **Fort William** lay between Koila Ghat Street, on the S, and Fairlie Place, on the N Its W side was on the riverside The W. and E. walls were 710 ft long, the N. side measuring 340 ft and the S. side 485 ft After it was abandoned as a fort it was used as a Custom-house until the river moved away from the site Part of the original arcades, which served as warehouses, may still be seen inside the yard of the Post Office The Custom House (1819) was demolished (1938) to build the Reserve Bank. Where possible, the outlines of the Fort have been indicated by brass rails let into the ground

At the N.E. corner of the Post Office is a tablet inside an arch, which indicates the actual site of the **Black Hole**[1] of 1756, which, under the direction of Lord Curzon, has been paved with black marble. The exact size of the room was 22 ft. by 14 ft., and its height was probably 16 ft. to 18 ft.; and into it were forced on the night of 20th June 146 human beings, of whom 23 only survived next morning. The old obelisk memorial of the tragedy, erected by the principal survivor, J. Z. Holwell, was removed in 1821, another placed in front of the Calcutta Collectorate, at the expense of Lord Curzon, in 1902, has been removed for traffic reasons Holwell, who was Governor in 1760, died in England at the age of eighty-seven in 1798.

[1] The Black Hole was merely a guard room of the Fort and was a portion of a sleeping barrack in the S.E. corner of the Fort, enclosed from the rest of the building The barrack was situated just to the N. of the S E bastion, and the Black Hole was therefore between the bastion and the barrack. Views of the Old Fort and of Holwell's monument are among Daniell's drawings of Calcutta (1786-1792), and may be seen at the Victoria Memorial Hall.

On the N side of Dalhousie Square are the long buildings of the Bengal Secretariat, known as **Writers' Buildings** (1880). At the W end St Anne's Church was built (1709-56)

E. of Writers' Buildings is the **Scotch Kirk**, St Andrew's, situated in Radha Bazar, and called by Indians *Lal Girja* (Red Church) It was opened in 1818. In the vestry there is a portrait of Dr James Bryce, the first minister, by Sir John Watson Gordon It sends a representative to the General Assembly at Edinburgh. Close by was the Harmonic Tavern, converted to a Sailors' Home (1837), demolished 1886. Lal Bazar was once a Rope Walk

E of the square, in Mission Row (once Rope Walk), is the **Old Mission Church**, called the Purana Girja, or *Old Church*, in the vernacular. It is 125 ft. long from E. to W, and nearly 82 ft. broad, and seats 450 persons. It was built by the celebrated missionary, Johann Zachariah Kiernander, who was born at Akstad, in Gothland, Sweden, in 1711, and educated at the Universities of Upsala

and Halle. Being offered a post as missionary, he left England for India in 1740 and found his way to Calcutta in 1758. His second wife left jewels, and he founded a school. He called his church, which was consecrated in 1770, Beth Tephilla, "House of Prayer." When blind he was deceived into signing a bond which ruined him, and the church was seized by his creditors, but redeemed by Charles Grant (afterwards Chairman of the E.I. Company) for Rs. 10,000. Kiernander then went to Chinsura, and died in poverty at Calcutta in 1799. There is a window in the church presented by his grandson, and a curious engraving of him, with an inscription in German, hangs in the Vestry Room. There are many interesting tablets in this Anglican church, one to Charles Grant, and others to the Rev. Henry Martyn (1781-1812), Bishop Dealtry of Madras (1796-1861), Bishop Daniel Wilson (1778-1858), and an Arab lady of distinction who was converted to Christianity.

Mission Row is one of the oldest streets in Calcutta. Tablets mark the houses once occupied by members of Warren Hastings' Council —Sir John Clavering and Colonel Monson and his wife, Lady Anne.

N.W. of Dalhousie Square is the European commercial quarter, in "Clive Street". Principal buildings are Gillander House, the Chartered Bank, the National Bank of India, the Stock Exchange, and Messrs Martin & Company's buildings; the distinguished head of this firm, Sir Rajendra Nath Banerji, died in 1936. The Hong-Kong Bank is on the site of Assembly Rooms, perhaps the "Lecture House" where Lord Metcalfe was born (1785). The Royal Exchange Building houses the Bengal Chamber of Commerce (1833). It stands on the site of a house once occupied by Clive and then by Philip Francis. The East India Railway Office (1879) is in Fairlie Place, where a gun was found (1940) in the All India Radio compound. The Armenian Church of Holy Nazareth (reached from China Bazar Street) is the oldest place of Christian worship in Calcutta, built 1724 (tombstone in graveyard, 1630). When the Portuguese first came to Calcutta, the English granted them a piece of land in Portuguese Church Street, on which the friars of the order of St Augustine erected a chapel in 1700. Its successor, the **Roman Catholic Cathedral**, was built in 1797, and is dedicated to the Virgin Mary of the Rosary. The Greek Church, formerly in Amratolla Street, was built in 1780, but was pulled down and a new one erected in Ashutosh Mukharji Road, Bhowanipur (p. 114). The first priest of the church, Father Parthenio, is said to have been the model for the figure of the Saviour in Zoffany's picture at St John's Church. Tramways (horsed) first ran through Clive Street in 1889.

From the N.E. corner of Dalhousie Square, Lal Bazar (Police H.Q.) and then Bow Bazar lead to **Sealdah** station, the terminus of the Bengal-Assam Ry., comprising the N. stn. (for suburban trains), the Main stn. (for N. and E. Bengal), and the S. stn., formerly Mutla stn. (for trains to Diamond Harbour, Budge Budge and Canning Town). The Railway Colony and Clem Browne Institute lie to the N. and the Campbell Hospital to the S. of the station.

College Street crosses Bow Bazar and leads, to the N., past the Eden, Ezra, and Medical College Hospitals, and the Medical College,

to College Square, with the Bengali War Memorial.

The Ezra Hospital is for Jews only. The **Medical College Hospital** was erected in 1853, and the **Eden** Hospital for women and children in 1882. Other extensions include a Surgical Ward, an Eye Infirmary, the Prince of Wales' Hospital, the Electrical Annexe. Behind the Hospital is the **Medical College** (1834)

On the N side of College Square is the **Sanskrit College**, which was founded by Warren Hastings in 1781: and on the W side are the **Calcutta University** (1857), Hare School, and the Presidency College. The University Senate House great hall, 120 ft. by 60 ft., in which the Convocations take place, has a portico supported by six lofty pillars. In the vestibule is a marble seated statue of Prasanna Kumar Tagore, the founder of the Law Professorship. Part is occupied by the Ashutosh Museum of Indian Art (1937) The Law College and lecture halls adjoin Close by is the **Hare School**, which is self-supporting It was erected out of the surplus fees of students. The **Presidency College** was developed in 1855 from the Hindu College, founded in 1824, and opened in 1827, at a cost of Rs 170,000 The foundation-stone of the new building of this College was laid in 1872 by Sir George Campbell

Farther N., in Cornwallis Square, is the (*Free*) *Church of Scotland Mission*, begun by Alexander Duff in 1830. The Scottish Church is in Wellesley Square. E. of Cornwallis Square and N. of the end of Beadon Street (abutting on Circular Road, which in its upper portion marks the line of the Mahratta ditch, hastily dug in 1742, when these marauders invaded Orissa and Bihar) is Halsi Bagan Road, so called from the gardens of the well-known Omichand (Amin Chand, died 1758). He threatened to expose negotiations with Mir Jafir, and was tricked by Colonel Clive. In a lane are the marble **Jain** temples in the garden known by the name of Badri Das. The temples are dedicated to the 10th Tirthankar, Sitalnath Ji, and the gardens form one of the prettiest spots in the whole of Calcutta, and should be visited by all who have a spare half-hour

The Bose Research Institute, 93 Upper Circular Road, founded by Sir Jagadis Chandra Bose, F R S (died 1937), adjoins the **University College of Science**, a fine four-storeyed building The biological laboratories are at 35 Ballygunge Circular Road. At 243/1 is a Museum of Bengali relics

The Botanical Gardens

The Royal Botanical Gardens, Sibpur, on the W bank of the river, opposite Garden Reach, were founded in 1786, on the suggestion of Colonel Kyd, who was appointed the first Superintendent He died in 1793, and has had many eminent successors, among them Roxburgh, Buchanan - Hamilton, Wallich, Griffith, H. Falconer, Sir G. King, and Sir D Prain—all well-known botanists The visitor may drive across the bridge and through Howrah, turning left over the E I. Railway by a bridge, or may take the ferry service from Chandpal or Takta Ghats to the Botanical Garden Ghat (if open), or may cross from Metia Bruz

Ghat, ½ m. beyond Garden Reach. At Sibpur is the Engineering (Civil) College (1880), once the Bishop Middleton English College. The area of the gardens is 270 acres, with river frontage of a mile. At the N W corner is the Howrah Gate From College Gate an avenue of Palmyra palms to the right, and one of mahogany trees to the left, lead to the centre and the memorial of Colonel Kyd, past the palm plantation, which is separated off by a canal crossed by pretty bridges From the memorial an avenue of palms leads S to the Garden Ghat; and close by it are three conservatories Leaving the above avenue to the left, the Great Banyan Tree [1] (*Ficus indica*) covers ground 1251 ft in circumference, and was over 88 ft in height The central column, damaged by fungus and a cyclone (1919), had to be eradicated in 1925, to preserve the radial parts, increased by pruning and grafting

'The bended twigs take root and daughters grow
About the mother tree, a pillar'd shade,
High over-arched and echoing walks between.' —MILTON, *Paradise Lost*

On the left of an avenue near it is a monument to Roxburgh, with a Latin epitaph by Heber Sir J Hooker wrote in his Himalayan Journals that "the great Indian Herbarium, chiefly formed by the staff of the Botanical Gardens, under the direction of Dr Wallich, and distributed in 1829 to the principal museums of Europe, was the most valuable contribution of the kind ever made to science"; and added that "the origin of the tea-culture in the Himalayas and Assam was almost entirely the work of the Superintendent of the gardens at Calcutta and Saharanpur." The Superintendent has a house near the Herbarium (1883), containing some 40,000 species of dried plants. Attached is a Botanic Library.

[1] The name, according to Tavernier (1650), was given to this tree (which is the Hindustani *bar*) from the fact that the *banyas* or Hindu traders at Gombroon (Ormuz) in the Persian Gulf, built a little pagoda under one of them, which was the only tree that grew in the island.

Excursions in the Vicinity of Calcutta

(a) *Left bank of the river By rail from Sealdah, the Calcutta terminus of the Bengal-Assam Rly*

At Dum Dum junction, 7 m from Calcutta, is the aerodrome Passengers are taken to the Grand Hotel, Calcutta. It was the headquarters of the Bengal Artillery from 1783 till 1853, when they were removed to Meerut, and their mess-house is known as the *Outram Institute* A bust of Sir James Outram stands in the veranda. There is a monument to Colonel Thomas Deane Pearse, "Father of the Bengal Artillery"

In the centre of the Barrack Square is a huge gun Near this is a monument to the officers and men killed in the retreat from Kabul in 1841-2 The treaty which restored the British settlements after the recapture of Calcutta in 1757 was signed at Dum Dum Lord Clive had a house here, and Fairy Hall was occupied by Sir Henry Lawrence (1838) when a Lieutenant in the Bengal Horse Artillery

Dum Dum is connected to the E.I. Ry. by the Bally Bridge.

14 m. from Sealdah **Barrackpore** is called Chanak by Indians. "That the name is derived from Charnock (the founder of Calcutta on 24th August 1690), who founded a small bazar here, is quite untenable, for Chanak is a common Bengali appellation for a village, and appears as Tchanuk in an old Dutch map of India, drawn early in the 17th century, long before Job Charnock became a known man."[1] The journey may be made also by road, or river, by private steam-launch The river excursion may pleasantly be extended to Serampore, Chandernagore, Chinsura, and Hooghly, places on the opposite bank (see p. 127)

The beautiful park (left bank) has noble trees, a pier, and golf-course At 300 yds to the S of the house, under a fine tamarind tree, is a polygonal enclosure, within which is a white marble monument to Lady Canning, it replaces that removed to St John's Church at Calcutta. The tomb of Sir John Herbert, Governor of Bengal (d 1943), is in the grounds. A Hall, built by the Earl of Minto in 1813, stands 100 yds. to the N of the house within a colonnade of Corinthian pillars Over the outside entrance is a black slab, inscribed—"To the Memory of the Brave"

On the walls are four tablets, erected by different Governors-General to the memory of British soldiers who fell in Mauritius (Isle of France) and Java, 1810-11, and at Maharajpur and Panniar, 1843

The House, which used to be the Viceroy's country residence, is now used by the Governor of Bengal. The original bungalow belonged to the Commander-in-Chief and was appropriated in 1801 by Lord Wellesley, who laid out the park and began to build a "country villa." But this was never completed beyond the lower storey, and the existing building was enlarged by the Marquess of Hastings (1813-1823) There are golf-links in the park to which the public are admitted. N. of the park is Barrackpore **Cantonment**, first used for the purpose in 1772, when the place received its name. In 1824, during the First Burmese War, the 47th B.N.I., which was ordered on service on the 30th October, refused to march, under the impression that a sea voyage would be necessary, and for want of transport, for which in those days they had to pay The Commander-in-Chief, Sir Edward Paget, proceeded to the Cantonment with two European regiments, a battery of European artillery, and a troop of the Governor-General's bodyguard. The regiment was ordered to ground arms, but the sepoys remained motionless, and the guns opened upon them. Throwing away their arms and accoutrements, they made for the river. The regiment was struck out of the "Army List," but another, of Bengal volunteers, was raised. In March 1857 mutiny troubles were checked for the moment by the personal bravery of General Hearsey,[1] commanding the troops. The 19th N.I. and 34th N.I. were disbanded in March and May. It became necessary to disarm all the sepoys at the station on 14th June.[2]

[1] *Calcutta, Old and New* (p. 993), by H. E. A. Cotton.

[1] General Hearsey, who as a subaltern had taken part in the defence of Sitabaldi and was styled "Hero of the Grand Army" (p 136), had previously shared in the suppression of a mutiny of Bengal Troops at Wazirabad (p. 361) in 1849.

[2] The 70th B I. alone remained loyal and volunteered for service in China.

The **Race-course**, which was opened in January 1927, is the property of the Royal Calcutta Turf Club. It is 1¼ m. from Barrackpore station by road, a branch railway runs direct to the back of the stands The course is just 50 yds short of 1⅜ m., with easy turns, and is 100 ft wide, with a straight run in of half a mile. There are two stands, with sloped lawns in front There are three Race days in November

There is a Small-arm Factory at Ichapur, 3 m. to the N of Barrackpore; and at Cossipore ¼ m N. of the Circular Canal is a Gun and Shell Factory on the bank of the Hooghly, also an Electric Generating Station

(b) Right bank of the river By rail from Howrah, the Calcutta terminus of the E.I Rly

Howrah (population 379,122) is on the right bank of the Hooghly N.G. railways to Amta (28 m) and to Sheakhala (20 m). The Bhotbazar temple in Ghusri to the N is an old Tibetan monastery, established by Warren Hastings in 1775, at the request of the Tashi Lama of Tibet. In 1720 there were docks and Armenian gardens.

The following places in the neighbourhood of Calcutta may be visited by car along the Grand Trunk Road, narrow in places, or by the E I Railway

3 m from Howrah stn., **Liliooah** Here are the extensive carriage and wagon works of the E I Ry, and also the locomotive sheds An interesting example of a railway colony, with its English Church, Club and Institute, bowling-green and golf-links

4 m **Belur** is the home of the **Ramakrishna Mission** 6 m **Bally** is a most orthodox and holy town To Bally the Brahmans, who witnessed the execution of Nuncomar in 1774, ran to purify themselves in the river There is a fine library at the adjoining hamlet of Uttarpara, founded and maintained by the Mookerjee family of Zamindars. The Willingdon Bridge (seven spans of 350 ft) over the Hooghly at Bally (opened by the Viceroy in December 1931) gives direct access to the Kidderpore Docks In addition to a double rail-track it carries an 18 ft roadway in both directions for vehicles and 8 ft pathways The Marine Air Port is downstream.

11 m. **Rishra**, the site of an old chintz factory. Rishra House, which is close to the Hastings Jute Mills, was owned by Warren Hastings from 1780 to 1784.

13 m **Serampore** station is on the W bank of the Hooghly, opposite Barrackpore Serampore was formerly a Danish settlement, and was then called Fredericksnagore The mansion of the Danish Governor is now the Subdivisional Officer's Court. In 1845 a treaty was made with the King of Denmark, by which all the Danish possessions in India—namely, Tranquebar, Fredericksnagore, and a small piece of ground at Balasore—were transferred to the E.I. Company for £125,000 The treaty confirmed the privileges conferred on Serampore College by the Royal Charter of the Danish King Bankibazar, a settlement of the Dutch Ostend Company, closed 1743, was opposite.

The chief claim to notice arises from its having been from 1800 onwards the scene of the labours of Carey, Marshman, and Ward. The zeal and success of the Baptist missionaries of Serampore form one of the brightest episodes of evangelistic efforts in India From its press proceeded forty translations of the Scrip-

tures. Serampore is now a centre of jute and cotton manufacture.

The old *Danish Church* (St Olaf's, 1805) cost Rs.18,500, of which Rs 1000 were given by the Marquess Wellesley; it is now Anglican. In it are tablets in memory of the three missionaries Their tombs are in the Baptist cemetery, on the right hand of the Grand Trunk road from the old railway station

The *College*, founded in 1818 by the Serampore missionaries, on the banks of the river, commands a fine view across it over Barrackpore Park The College has Faculties in Arts and Theology, and confers its own Divinity degrees The Great Hall is 103 ft. long and 66 ft broad In it are portraits of Frederick VI of Denmark (who gave the College its Charter, empowering it to grant degrees in all the sciences) and of his Queen, of Dr Marshman, by Zoffany, and of King Christian of Denmark and his Queen The last portrait does *not* represent Madame Grand, who afterwards married Talleyrand The portrait of Carey by Robert Home, which was here at one time, is now in the National Portrait Gallery in London

The Library contains first editions of Carey and Marshman's forty translations of the Bible, printed by Ward, curious Sanskrit, Tibetan and Pali manuscripts and a Persian manuscript containing the lives of the Apostles, prepared by Jerome Xavier for Akbar or Jahangir. Adjoining the Library is a Museum in which may be found Carey's crutches, three chairs that once belonged to the famous trio, a number of Carey's autograph letters and the marriage agreement between William Ward and Mary Fountain.

In the College compound is the house in which Carey died (1834). In 1910 a large and handsome hostel was erected. The Govt. Weaving Institute was established in the year 1909 for the purpose of training Indian weavers in modern methods of weaving.

The fine mansion next to the chapel, which was the common centre of the Serampore brotherhood, with all Carey's Park and botanic garden collected from all over the world, is the property of the India Jute Company Here, from 1835 to 1875, the weekly *Friend of India* was edited, and also the *Samachar Darpan*, the first verbacular newspaper in Bengal

At Mahesh, some 2 m from Serampore, there is a large and ancient temple dedicated to Jagannath The car festival in July is the largest of its kind in India outside Puri

14 m from Calcutta, **Sheoraphuli**, junction for a branch line (22 m) to **Tarakeswar** The ancient temple of Siva here is believed to be the richest in Bengal It is frequented by numerous pilgrims in February for the Siva ratri festival, when a three days' fair is held, and also in April for the Chait Sankranti, or **hookswinging** festival. The hooks are suspended through the fleshy muscles on either side of the spine.

21 m **Chandernagore** station The French settled here in 1673, and under Dupleix (1697-1764), of whom the place has a statue, a considerable trade arose during his superintendentship (1730-1741). In 1757 the Fort d'Orleans, bombarded by the Fleet, under Admiral Watson, surrendered, and the fortifications were demolished, but in 1763 the town was restored to the French. In 1794 it was again given up to the British, and held

till 1815, when it was again restored to the French. The railway station is just outside the French boundary.[1] A "Dutch Octagon" lay to the south, also a French Garden House occupied by Eyre Coote in 1779.

The buildings include the residence of the Administrateur, in which there is a bed that once belonged to Dupleix, a church built by Italian missionaries in 1726, and the Collège Dupleix, now a Higher English School.

At Goswami Ghat, between Chandernagore and Chinsura, a huge ruined temple is known to the neighbourhood as "Konē-Bo-yēr Mandir." At present there is no image in the temple, but formerly it was the temple of the Goddess Kali According to tradition, it was erected by one Devi Sarkar upon the wish of his brother's wife, who was the "Konē-Boū," or the youngest bride, of the Sarkar family

The three rly. stns. of **Chinsura** (23 m), **Hooghly** (24 m.), and **Bandel** junction (25 m) are so close together that it will be found most convenient to alight at the last named. The town of **Hooghly** is 2 m. from Hooghly stn.

A Hooghly factory was founded by the Portuguese in 1537 A.D., when the royal port of Bengal, *Satgaon* (p. 131), began to be deserted owing to the silting-up of the Saraswati river They commenced by building a fortress at Golaghat, close to the present Hooghly jail, some vestiges of which are still visible in the bed of the river. When Shah Jahan came to the throne complaints were made to him of the conduct of the Portuguese at Hooghly. The Emperor bore them a grudge, as they had refused to assist him against his father, and he sent a large force against the fort, which, after four and a half months' siege, in 1632, was stormed. Out of 300 Portuguese vessels only three escaped. The prisoners were sent to Agra, and forcibly converted to Islam. Hooghly was then made the royal port. The Portuguese returned to Hooghly in 1633. It was also the first settlement of the English in Lower Bengal. The E I. Company established a factory there in 1640, under a *farman* from Sultan Shuja', Governor of Bengal and second son of Shah Jahan. This *farman* was granted, according to tradition, to Dr Boughton, who had cured a favourite daughter of the Emperor, and asked for this reward. In 1669 the Company received permission to bring their ships to Hooghly to load, instead of transporting goods in lighters and then shipping them into the larger vessels In 1686 a dispute took place between the English and Shaista Khan, Nawab of Bengal, and the Company sent a force to protect their Hooghly factories. It chanced that a few English soldiers were attacked by the Nawab's men in the bazars, and a street fight ensued Colonel Nicholson on this bombarded the town, and 500 houses were burnt, including the Company's warehouses. Charnock, chief of the English factory, was obliged to fly to Satanati, where the merchants returned from Madras in 1690.[1] In 1742 Hooghly was sacked by the Mahrattas.

The principal sight at Hooghly is the **Imambara**, built by Karamat Ali (Superintendent 1837-1876), the friend and companion

[1] For the French possessions in India, see p. 647.

[1] See p. 101.

of Arthur Conolly, at a cost of Rs.300,000 from funds bequeathed by Muhammad Muhsin, who owned a quarter of the great Saiyidpur estate, in Jessore district, and died in 1814, without heirs, leaving a property worth £4500 a year for pious purposes. The trustees quarrelled, and Government assumed charge of the estate During the litigation a fund of £86,110 had accumulated, and with this the Hooghly College was founded in 1836 The façade of the Imambara is 277 ft by 36 ft , and in its centre is a gateway flanked by two minarets, or towers, 114 ft. high On either side of the door are inscriptions Within is a quadrangle, 150 ft by 80 ft , with rooms all round, and a fine hall paved with marble, having a pulpit with sides covered with plates of silver, and a verse of the Koran inscribed in each plate The library was bequeathed by Karamat Ali, but a few books have since been added by other people Among them are 787 MSS., including a fine folio Koran, in two volumes, given by Prince Ghulam Muhammad, son of Tipu Sultan. On the opposite side of the road from this Imambara is the old Imambara, built in 1776-77. In the W. corner lie the remains of Karamat Ali, and there is a white marble tablet placed against the wall, with an extract from the Koran, but no tomb

Chinsura, 1 m. S. of Hooghly, was ceded by the Dutch to the British in exchange for Sumatra in 1825. The octagonal *Dutch Church* is said to have been built by the Governor in 1678 In it are fourteen escutcheons, dating from 1685 to 1770, with inscriptions in Dutch The *Hooghly College* is to the S. of the church. There are 260 students. It was established, as a tablet in the hall testifies, "through the munificence of the late Muhammad Muhsin" in 1836. The house, according to local tradition, was built by General Perron, who lived at Chinsura for a year after his surrender to Lake in 1803 (p 428). It is a fine specimen of the Anglo-Indian domestic architecture of the period Old barracks and quarters are used as residences and offices The cemetery is 1 m. to the W. of the church , it contains many old tombs of former Dutch officials At Mahanad there is a temple with a sacred pool

Between Chinsura and Chandernagore is **Biderra**, where the British, under Colonel Forde, obtained a decisive victory over the Dutch on 25th November 1759. Forde was aware that his nation and the Dutch were at peace, and wrote to Clive for an Order in Council to fight. Clive was playing cards, and wrote in pencil: "DEAR FORDE,—Fight them immediately, and I will send you an Order in Council to-morrow."

Bandel, 1 m. N of Hooghly. Junction of the E.I Ry. and the B A Ry. The linking line, 5 m. long, crosses the river to Naihati (Route 24) by the great cantilever Jubilee bridge, 1213 ft. long (opened in 1887 by Lord Dufferin). A Portuguese monastery and church were built at Bandel in 1599, and the keystone with the date was erected in the new one, which is of brick, and very solidly built It is dedicated to Our Lady of the Rosary. There are fine cloisters on the S., and a priory, in which is a noble room called St Augustine's Hall. The church was founded by Augustinian friars, demolished by Shah Jahan in 1640, and rebuilt by John Gomez de Soto. Bandel is famous for its cream cheese.

About 6 m. above Hooghly, at **Satgaon**, is a ruined mosque with a few tombs, remnants of the old capital. It was built by Saiyad Jamal-ud-din, son of Fakhr-ud-din, who, according to inscriptions in the mosque, came from Amel, a town on the Caspian The river of Satgaon, up to Akbar's time, formed the N frontier of Orissa, and Satgaon flourished while the Hooghly flowed by the town

Down the Hooghly River from Calcutta to Sagar Island

The Bengal Pilot Service was inaugurated in 1667, when the pinnace *Diligence* of 60 tons with a crew was sent out The Calcutta pilots occupy a high position. The Hooghly is a most dangerous and difficult river to navigate, as, apart from the chance of cyclones, which take place in any month except February, there is the normal danger of shoals, which are continually forming, and nothing but a daily experience of the river can enable a pilot to take a vessel up or down safely The most dangerous shoal—called the "**James and Mary**" or Mukraputty—is 30 m. S. of Calcutta, just above the Rupnarain, but from the Damodar River to Hooghly Point, a distance of 6 m, the whole river is difficult. The s.s. *Sanctoria* foundered on the James and Mary Sand in 1919; but systematic dredging by three large dredgers has effected a marked improvement. The *Pathfinder* survey vessel replaced (1938) the *Industry* (1903). On this shoal the *Royal James and Mary* was wrecked in 1694. The name appears in a chart of 1711. The Hooghly used not to be navigated at night, nor until the tide made could it be ascended, but it has since 1915 been lighted in the Lower Reaches, that is, from Mud Point downwards, for a distance of 65 m. Vessels do not now usually anchor at Sagar Island, but, according to draft, can come up regardless of the state of the tide. The ordinary fall and rise of the tide is 11 ft. 8½ in. at Calcutta. A special feature of the rising tide is the bore, which hardly ever attains a height of 7 ft; 6 ft are regarded as the maximum, and that only as far as Chinsura. The bore reaches as far up the river as 5 m above Nadia, it very seldom does damage

The view of the river, with ships at anchor along the Strand and down to Garden Reach, is very striking, the Maidan, the Esplanade, the Fort and the imposing buildings along Chowringhi present a most impressive picture. From between Garden Reach and the Botanical Gardens the vista to the N. is especially fine when the atmosphere is clear. The Victoria Memorial dome is seen straight ahead. The "Hooghly sunsets" are beautiful

Seven m from Calcutta the last sight of the premier city of India is lost; 5 m. farther **Budge Budge** (Baj Baj, railway to Calcutta, 17 m) is passed on the left bank with its petroleum depots, at a similar distance farther on **Uluberia**, a small town, is passed on the right bank. Here the main road from Calcutta to the temple of Jagannath at Puri crosses the Hooghly, and here begins the Midnapore High-Level Canal. The river, which has hitherto followed a S.W. course, now turns due S. to Hooghly Point

At 27 m, a little above the

mouth of the Damodar, is (on the left bank) **Falta**, the site of an old Dutch factory, and the place to which the British retreated on the capture of Calcutta by Suraj-ud-daula in 1756, and from which Clive advanced to the recapture of Calcutta

From Falta a N G. railway runs 27 m. to Majherat junction on the B.A. Ry at Alipur, and the round trip can be made by Calcutta Steam Navigation launch (Armenian Ghat) and the railway, between 7 30 a m and 6 30 p m

The Damodar is navigable as far as Amta, which is 25 m. from its mouth, and quantities of coal are brought down from the Raniganj mines

5 m below Falta the Rupnarain river enters the Hooghly from the right bank nearly opposite Hooghly Point, and from here the river turns S E to Diamond Harbour, and then S again

At 12 m. up the Rupnarain river, on the right bank, is **Tamluk**, a famous city, and port of the Buddhists, where the Chinese pilgrim Fa Hian embarked for Ceylon about 400 A D. Hiuen Tsang about 645 speaks of it. It is now a long way from the ocean, but reached by the tide A *Temple* here, known by the name of Barga Bhima or Bhenna, was originally a Buddhist temple The shrine is surrounded by a curious triple wall Motor services from Tamluk to Panchkura (R.H.), Maisadal and Naraghat

At 48 m. from Calcutta is **Diamond Harbour** (left)—30 m. by a metalled road—where the E.I. Company's ships used to anchor. There is an old fort and a Custom House here, and the officers board ships proceeding up the river

There is also a railway to Calcutta (37 m.), with frequent trains, but only cruising liners touch here. Launches run to Sagar Island.

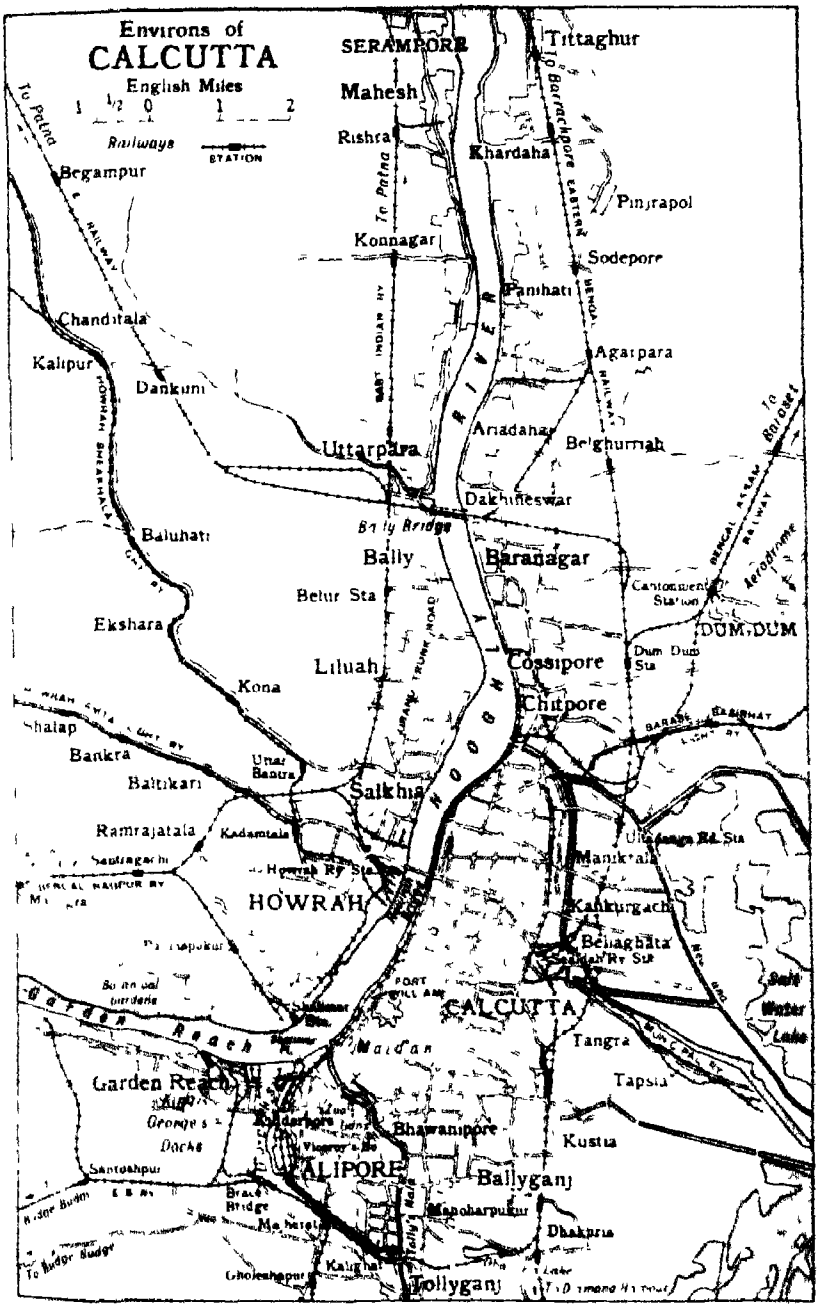
At 56 m. (left) is the town of **Kalpi** (Culpee), road to Calcutta. Here the estuary of the Hooghly begins, and at 99 m, between Kedgeree and **Sagar Island**, it is 15 m broad At this island, where the Ganges is considered to join the sea, pilgrims gather from all parts of India, but principally from the Bengal districts, in the early part of January, the date of the great Bathing Festival, which lasts three days. The island was overwhelmed by a cyclone or tidal wave in 1864, when only 1500 out of 5600 inhabitants escaped Fear of tidal waves retained the Docks at Calcutta with the disadvantage of dangerous navigation

Sport is abundant but tiger-shooting is very dangerous

The sea is reached at 82 m., where there is a lighthouse of iron, 76 ft high, commenced in 1808, on Middleton Point, at the S.W end of Sagar Island, but pilotage continues 40 m. to the Sandheads.

A pleasant trip by river is by the Cachar-Sunderbans Service from Armenian Ghat, Calcutta, down the Hooghly and round through the Sunderbans to Khulna; return by rail to Calcutta (Sealdah Stn.).

A longer journey of four to five days is by the Assam-Sunderbans Despatch Service (no regular timing) and from Juggernathghat (above Howrah Bridge) to Goalundo. Return by rail to Calcutta. Passengers must embark on the evening previous to sailing.


Environs of
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Kalipur
Dankuni
Uttarpara
Ariadaha
Belghurriah
Dakhineswar
Baluhati
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Cantonment Station
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Bankra
Baltikari
Salkhia
Ramrajatala
Kadamtala
Manikpur
HOWRAH
Kankurgachi
Belaghata
CALCUTTA
Garden Reach
Maidan
Tangra
Tapsia
Bhawanipore
Kustia
Ballygunj
Manoharpukur
Dhakuria
Kalighat
Tollygunj
HOOGHLY RIVER
To Patna
To Barrackpore
To Barasat
To Budge Budge
Salt Water Lake

ROUTE 7.

BHUSAWAL to CALCUTTA (HOWRAH) by Akola, Wardha (for Warora and Chanda), Nagpur, Kampti, Raipur, Bilaspur, and Sini, and from Sini to (*a*) Purulia and Asansol, and (*b*) Ranchi and Kharagpur.

This route from Bombay to Calcutta is 1223 m., or about 130 m shorter than any other. Time, 37 hrs from Bombay. The scenery in parts of the line, notably at *Darekasa* and *Dongargarh* (p 139), and *Saranda* (p 141), is very fine

The Route from Bombay to

276 m. from **Bombay, Bhusawal** junction (R), is described in Route 2.

Soon after leaving Bhusawal the traveller enters the districts of Berar (area 17,000 sq. m.), which continue almost all the way to Nagpur They were awarded to the Nizam after the Second Maratha War of 1803, and assigned by the Nizam to the British by a treaty in 1853, for the support of the Hyderabad Contingent Force In December 1860, in recognition of the Nizam's services in the Mutiny of 1857,[1] a debt of 50 lakhs was cancelled, the districts of Dharaseo (now known as Osmanabad) and the Raichur Doab were restored, and the Hindu State of Shorapur (administered by Meadows Taylor from 1841 to 1853) was ceded to him. By an arrangement in December 1902, made by Lord Curzon with the late Nizam, involving a fixed payment of 25 lakhs yearly to the Hyderabad State, in consequence of further arrears of payment, the permanent administration of the Berar districts by the British Government has been secured, and they were added to the Government of the Central Provinces. The Hyderabad Contingent Force has since been incorporated in the Indian Army without further obligation on the Nizam. In March 1926 the Viceroy (Lord Reading) and the Secretary of State (Lord Birkenhead) decided against the reopening of the settlement of 1902 In 1936 a further agreement was made by which, in respect of Berar, H E H the Nizam acceded to the Government of India Act of 1935 His suzerainty over Berar is acknowledged and his flag will be flown alongside of the British flag. His heir apparent is styled Prince of Berar.

The Berar districts form one of the richest and most extensive cotton-fields in India The soil is black loam overlying basalt The districts of Berar are Akola, Amraoti, Buldana, and Yeotmal. The railway to Nagpur was opened in 1867 There are many railway branches and light railways

308 m **Malkapur.** Motors available to Jalna (Hyderabad State Ry.) *vid* Buldana (D.B.), alt 2119, 28 m. S. from Malkapur. "The coolest and most pleasant headquarter station in Berar."

333 m **Jalamb** junction (D B.) for a branch 8 m. S. to *Khamgaon* (D.B.) station, where there is an important cotton and grain mart. About 50 m. S from Khamgaon (motors available) is the town *Mehkar*, and 15 m. S. of Mehkar is a curious soda lake called *Lonar*, formed in the crater of an extinct volcano. The salt is used for washing and dyeing purposes, and is exported in considerable quantities

[1] The Nizam, Nasir-ud-daula, died in May 1857; but his successor, Afzal-ud-daula, carried on his policy.

363 m. from Bombay, **Akola** (D.B.K.) station, alt. 953, is the headquarters of a district, and one of the principal centres of the cotton and grain trade in Berar

A road from Akola runs S. to Basim (D.B.) and to Hingoli (p 85) 73 m.

Another road runs N to Akot (28 m.), whence Narnala Fort is about 15 m —the last 5 m impassable for motors. Another fort at Balapur, 13 m W of Akola Motors available. Balapur was the headquarters of the Imperial Army in the Deccan in the time of Akbar

386 m **Murtazapur**, junction for Central Provinces N G. Railway, 48 m N to Ellichpur Anjangaon (32 m) is on the watershed of the Tapti and Wardha basins Another N G railway 70 m S.E to Yeotmal (hdqrs. of district) Ellichpur was the administrative capital of Berar until 1853 The deserted Cantonment here was garrisoned by Hyderabad Contingent Infantry until 1903. There is a group of Jain temples at Muktagiri, 7 or 8 m N of Ellichpur, on the Betul road, in a valley

413 m. **Badnera** junction (waiting-room, D.B.K), branch 6 m. N to **Amraoti** station (waiting-room, D.B.K, near railway station) Amraoti is the headquarters of the Commissioner of the Berar Division There is a cotton market here

An object of interest is the hill fort of **Gawilgarh**, a stronghold, the Governor of which founded the independent kingdom of Berar (Imad Shahi dynasty) in 1484. It was absorbed by Ahmadnagar in 1574. This fortress of the Mahratta Raja of Berar was taken by Colonel Arthur Wellesley on 15th December 1803 in the Second Mahratta War. The ramparts were demolished in 1858 It is situated S.E. of

Chikalda, which is a small sanatorium, dating from 1839, on a plateau in the Satpura hills, about 3819 ft above sea-level, 5 m. long by ¾ m. broad It is visited during the hot season by a few officers from Nagpur and Amraoti; the bungalow accommodation is very limited, and the place presents few attractions Motors (all classes) from Amraoti (62 m.) and from Ellichpur station (30 m)

453 m **Pulgaon** junction N G. ry to Arvi, 22 m (D B K.) on the Wardha river and 36 m from Wardha

472 m from Bombay, **Wardha** (R), chief town of the Western District of the Central Provinces and Berar, is the junction for the broad-gauge line (opened 1876) to *Warora* (83 m), and the Balharshah Colliery in the Chanda District and on the shortest route to Madras. The town is the residence of M. K Gandhi and is a considerable cotton mart. There are a D B, a Sarai, a Town Hall, Church, Circuit House, also a Medical Mission of the Church of Scotland The Wardha Vidyamandir is an educational experiment sponsored by the Central Provinces Government The town is lit by electricity The late Rao Bahadur Bachraj's temple of Lakshminarayan is richly carved and decorated.

Hinganghat (D.B.K), a station on the Wardha Balharshah branch, 21 m. from Wardha, is a very old cotton market The town is lit by electricity. There are two cotton-spinning and weaving mills, besides cotton ginning and pressing factories

45 m. **Warora** station (D.B.), in the Chanda District and a con-

siderable cotton mart. The colliery was closed in 1906.

74 m. **Chanda**, the headquarters of the Chanda District (D.B. and Circuit House), is surrounded by remains of the city of Bhadravati, visited by Hiuen Tsang, a Chinese pilgrim. The town is surrounded by a continuous wall of cut stone 5½ m. in circuit with four gates, ornamented with Gond crests. The civil station lies to the N. There are extensive forest preserves in the neighbourhood.

Tombs of the Gond kings, and the temples of Achaleswar, Maha Kali, and Murlidhar, are all worth a visit. The tomb of Bir Shah (*d.* 1672) is of carved white stone, and the oldest is that of Ballal Shah (1207-42). At *Lalpatk*, in the town, a large space is covered with monolith figures of gigantic size, which appear to have been prepared for some great temple never erected.

Chanda Fort is connected with Nagpur by a N.G. ry., Chanda Fort-Itwari (Nagpur), 135 m., through Nagbhir. Chanda is 125 m. by road from Nagpur and 129 m. from Sironcha, but the rivers are unbridged and passable only in the dry season.

83 m. from Wardha, **Balharshah**, (Ballarpur), a coal-mining centre (1906) with the Ballarpur, Ghusgus, Sasti, and Rajura collieries. There is iron ore near by but not worked. The fort was founded by the Gond king, Khandkia Ballal Shah (1437-62), and underground passages are believed to run to Chanda Fort. There is a teak depot at Allapilli.

A broad-gauge line (1928) runs from Balharshah to Kazipet (p. 559) in the Nizam's Dominions, providing a new direct route (shorter by 200 m. than the route *viâ* Manmad) from Madras to Delhi.

520 m. from Bombay on the main G.I.P. Ry. line is **Nagpur**,* the capital of the Central Provinces and Berar, which have an area of 133,050 sq. m. The Governor is H.E. Mangaldas Parewasi, who was appointed in 1947.

The District of Nagpur itself has an area of 3840 sq. m. Among the inhabitants are many aborigines known as Gonds. Of these the hill-tribes have black skins, flat noses, and thick lips. A cloth round the waist is their chief garment. The religious belief varies from village to village. Nearly all worship the cholera and the small-pox deities, and there are traces of serpent worship.

The ancient history of the Provinces is very obscure. In the 5th century A.D. a race of foreigners, *Yavanas*, ruled from the Satpura plateau, and between the 10th and 13th centuries Rajputs of the Lunar race governed the country round Jubbulpore, while the Pramars of Malwa ruled territory South of the Satpuras. The Chanda dynasty of Gonds reigned probably as early as the 10th or 11th century, and the Haihayas of Chattisgarh were of more ancient date. In 1398 there were Princes reigning at Kherla, on the Satpura plateau, of whom Ferishta says "They possessed all the hills of Gondwana." In 1467 they were conquered by Muhammad Bahmani (1463-82). The Gonds again rose to power in the next century, but in 1740 Raghuji Bhonsla conquered the country. At Sitabaldi, on the 26th and 27th of November 1817, the Mahratta troops of the Bhonsla Raja, Appa Sahib, attacked the resident, Mr. (afterwards Sir Richard) Jenkins, and the few troops he had been able to assemble. The Mahrattas for a time got possession of one of the two eminences of the Sitabaldi

hill. The British were at length victorious, but the disbandment of the Bhonsla's army was only obtained after a second battle. Appa Sahib escaped, and died in exile. A child was raised to the throne under the title of Raghoji III., and on his death, in 1853 without issue or collateral heirs, the country was annexed by the British. In 1861 it was, with the Saugor and Narbada territories (which had been taken over in 1818) formed into the Central Provinces by Lord Canning.

On the 13th of June 1857 the cavalry of the Nagpur Irregular Force conspired with the Muslims of the city to rise against the British, but the Madras infantry and artillery remained loyal, and the outbreak was suppressed. Sitabaldi Fort was provisioned to stand a siege, but fortunately the emergency did not arise.

Nagpur (pop 301,957) is bounded on the S by the river Nag, from which it takes its name. The municipality includes the suburb and civil station of *Sitabaldi*. In the centre, W. of the railway station, is Sitabaldi hill, crowned by a fort (built in 1818, and possessing many antique specimens of arms), which commands a fine view, and is a landmark for miles round. W. of Sitabaldi hill is the civil station, in which are the Secretariat, in modified Renaissance style; the Courts; the Legislative Council Chamber (enlarged), the Science College and University (1923), the Victoria Memorial Technical Institute, the Central Provinces' Club-house, the English Church which has been enlarged into a Cathedral (Diocese 1902), a Roman Catholic Cathedral and school; Mission of the Church of Scotland; two hospitals for men and women; and a fine Mahratta church; the High Court also (Letters Patent, 1936). N. are the Police Lines and the Sadr Bazar, and the suburb of Takli, once the headquarters of the Nagpur Irregular Force. Government House is on Takli hill; in the hot weather the residence of the Governor is transferred to Pachmarhi (p 44).

Sitabaldi is the suburb S of the hill of that name, N.E. of which is the railway station; beyond, to the E, is the Jumá Talao, a large tank; and still farther E. is the city, hidden in foliage Three great roads lead from the civil station through the city—one on the N and one on the S bank of the tank; the third, and most Northerly of the three, crosses the railway by a bridge to the N. of the station Besides the Jumá Talao, there are two other fine tanks, the Ambajheri and Telinkheri (200 acres), W. of the city. The Ambajheri Tank, built by the Bhonsla Rajas, was in 1873 brought into use as a reservoir The city's water supply was greatly increased by the opening, in 1911, of the Gorewara reservoir, about 4 m. to the N W of the civil station It has a dam 2350 ft long and a capacity of 312 million c ft A scheme for drawing water from the Kanhan river will supplement the supply. The chief gardens are the Maharaj Bagh, near Sitabaldi, the Tulsi Bagh, inside the city, and the Paldi, Shakardara, Sonagaon, and Telinkheri gardens in the suburbs

Nagpur is famous for its delicious oranges, quantities of which are exported There are two large cotton-mills There is also a Museum maintained by Government grant

The *Bhonsla Palace*, in the city, built of black basalt, was burned down in 1864, and only the Nakkar Khana, or Hall of Music, remains. Near it are the Hislop College (Missionary) and the Town Hall The Morris College (Government), formerly in this neighbourhood,

is now in the old Residency building, at the foot of the Western slope of Sitabaldi hill.

The *Cenotaphs of the Bhonsla Rajas* are in the Shukrawari quarter, to the S of the city.

The Great Indian Peninsula Railway terminates at Nagpur, and from this point E to Calcutta (703 m.) the line belongs to the Bengal Nagpur Railway N.G rys., 92 m N to Chhindwara (p 138), and 139 m S to Chanda Fort, on the G I P branch from Wardha (p. 135). The railway for 144 m E of Nagpur was constructed to the metre gauge, opened 1882, and converted 1888.

529 m. **Kampti** (D.B K.), a large town and military Cantonment (1821), on the right bank of the Kanhan river, which is spanned by a handsome stone bridge (1873) that cost £125,000. Close to it is the railway bridge, 1237 ft long (1887). The Anglican church was built in 1833, and there is a Roman Catholic establishment of the Order of St Francis de Sales, with a church and convent. There are five mosques and a number of Hindu temples

Beyond Kamptu, and 25 m. N E. of Nagpur, from which it is easily accessible by road or a branch of the B N Railway, is **Ramtek**. The town runs in a straggling line along the foot of a well-wooded hill sacred to Rama, from whom it takes its name The hill is crowned by a citadel with a double line of defences, and within the citadel, at the Western end of the summit, stands a group of temples, which are the object of pilgrimages from all parts of India. The inner line of defences was built after 1740 by Raghoji I., the first Bhonsla ruler of Nagpur, but the citadel itself is much older, and the temples are shown by inscriptions to be at least 600 years old. The principal temples are those of Rama, and Sita, his wife Below the Eastern end of the hill, in a picturesque valley, lies the village of Ambala, with a small tank surrounded by temples, erected by individual devotees. From Ambala a flight of steps rises to the summit of Ramtek Hill. A good road runs E (3 m.) to Khindsi irrigation reservoir, like a Scottish loch, with a capacity of 4059 million c ft

559 m. **Bhandara Road** station is about 7 m. from Bhandara, the district headquarters, which is close to the Wainganga river. There are a R H. and a Club In the town there is a shop (Tyeb Ali's) where oilman's stores (not in great variety) can be obtained. Bhandara is on the main road from Nagpur to Raipur. A branch road runs to the railway station, motors available (S).

At 573 m., beyond Tumsar Road station, is the Weinganga river, with a bridge 1450 ft. long (1887).

601 m. **Gondia** junction (D B K.). N G. line from here N. *viâ* Balaghat to Nainpur junction, 73 m., and Jubbulpore (p. 44), 141 m., crossing the Narbada river at 132 m. by a bridge 1228 ft long (1905).

A N G loop-line also runs S to Naghbir (82 m.), in Chanda District, whence one branch goes to Nagpur (70 m.) and another to Chanda (69 m.), crossing the Weinganga river at 66 m., bridge 2602 ft long (1908)

There is a good R H and waiting- and refreshment-rooms at the station, where good stores can be bought From Gondia a road runs S to Arjuni (28 m.) on the Great Eastern Road from Nagpur to Raipur, and the Dis-

tricts beyond The forests in the neighbourhood of Arjuni (R.H.) offer attractions to the sportsman (licence necessary).

At **Nainpur** junction, 73 m (D.B.K.), the Mandla District is entered. From Nainpur a branch line (26 m., opened in 1909) runs N.E. to Mandla Fort (D.B.), the headquarters of the district The railway station is on the opposite side of the river Narbada to the town The road bridge is 2300 ft long

Mandla (supposed to have been named Mahishmati) is of interest as the capital of the Garha-Mandla Gond (Nishad in old Sanskrit documents) Rajas The dynasty was of Dravidian origin, founded by Eklavya, who killed the last Haihaya king, of which dynasty there was a copper-plate grant in A.D. 123 Driven from the rich plains of Jubbulpore and Saugor about 1564 by the Mughals, the Rajas re-established themselves first at Ramnagar, a riverside village 10 m from Mandla, and afterwards at Mandla. Hirde Shah, who reigned in the middle of the 17th century, built himself a palace at Ramnagar, now in ruins. It is three-storeyed, built for strength alone, and commands a magnificent view of the river Narbada, which flows at the foot. A Sanskrit inscription (1667) gives the names of the Gond kings Mandla fort was built a few years later by a succeeding Raja, Narendra Shah, on three sides it is surrounded by the Narbada, and on the fourth by a deep ditch. A bastioned wall once encircled it, but Mandla masons have robbed the old battlements piecemeal of their stones, and the site of the fort is now a luxuriant tropical jungle. The foundations of the wall, however, are still visible, and a few of the larger towers have survived.

The District is rich in forests, which teem with game. Tiger, panther, bison, sambhar, barasingha, and chital may be found. Means of transport and communication, however, are very difficult. Carts are practically useless, and heavy luggage must be carried either by camels or pack-bullocks. The easiest means of approaching the Eastern parts of the District is by train to Birsinghpur, on the Bilaspur-Katni extension of the Bengal - Nagpur Railway, and thence by an indifferent road, 42 m in length, to Dindori, the headquarters of the Eastern Tahsil.

The river Narbada, which rises a mile or two outside the Eastern border of the District, forms in the neighbourhood of Mandla a deep ten-mile reach, nearly half a mile broad Its banks are studded with temples and ghats, for the water hereabout is of peculiar sanctity, and bathing in the sacred stream is popularly supposed to wash away all sins The only temple of antiquarian interest is at Kukarramath, built by Jains about the 10th century It is situated 9 m from Dindori and 73 m from Mandla Local superstition supposes that a cobra with red eyes circles the neck of the image every night and spreads his hood over Mahadeo's head

From **Nainpur**, in the Mandla District, there is also a line (narrow gauge) W. to Chhindwara *viâ* **Seoni**, a distance of 88 m. Seoni is a District well provided with principal roads and D.B. and Inspection Bungalows By this line Chhindwara is 157 m from Jubbulpore and 161 m from Gondia. Chhindwara is also 78 m. by road, or 92 m. by the narrow-gauge ry., N. of Nagpur. This railway continues to the Chhindwara coalfield at Khirsadoh

(branch to Parasia) and Barkuhi—a difficult piece of work

The G.I.P. Ry. broad-gauge line from Nagpur to Itarsi passes through the S.W. corner of the Chhindwara District. A branch runs from Amla, in the Betul District, to Parasia (54 m.) through the Chhindwara coalfield. The chief collieries are Damua, Lower Ghorewari, Datla, and Junnordeo. Pench (2700 ft.) (D.B.) is 1½ m. from Parasia.

Five metalled roads radiate from Chhindwara to (1) Nagpur, (2) Seoni, (3) Narsinghpur, (4) Matkuli on the Piparia-Pachmarhi Road, and (5) Multai on the Nagpur-Betul-Itarsi Rd. Petrol available at Parasia, 17 m. N. on the Matkuli Road. There are several D.B.'s. Chhindwara Dt. is not a good district for shikar. The climate is cool.

Deogarh, 10 m. W. from the Nagpur road and ry. at Umra Nala (on the Nagpur line) has a small fort, which was the headquarters of the Gond Raja, Bakht Buland (*c.* A.D. 1700). The buildings cover the hill. The Chhindwara coalfield is the most important in the Central Provinces. Chicoli at mile 41 of the Nagpur-Betul road, has a banyan tree covering about 2 acres. The D.B. at Tamia, 15 m. N. on the Matkuli Rd. has a fine view of the Pachmarhi hills. An hour's run by motor E. of Tamia along the Chindi Road brings one within a short walk of the edge of the Patalkot. This is a wild valley, 1500 ft. deep and 3 m. wide, with numerous precipices.

14 m. from Gondia on the main route from Bhusawal to Calcutta is

615 m. **Amgaon** station (R.)

At Amgaon the **Chattisgarh** country is entered and continues to **Raigarh** station at 859 m. The people of this country still consider themselves a separate nationality, and always call themselves *Chattisgarhias*. Except in the hilly portion, the population is almost pure Hindu. The Rajas of Ratanpur (p. 140) ruled originally over their thirty-six forts, each the chief place of a District, but about A.D. 750 the kingdom was divided into two, and a separate Raja ruled in Raipur. Kalyan Sahi, who ruled between 1536 and 1573, made his submission to Akbar at Delhi, and this prudent conduct resulted in the Haihaya rulers retaining their country until the Mahratta invasion in 1740.

The tract is in the shape of a vast amphitheatre opening to the S. on the plains of Raipur, but on every other side surrounded by tiers of hills. It is a great grain-producing country, irrigated from the Mahanadi river. There is considerable forest land, where excellent shooting can be had.

From 624 m. **Salekasa** the line passes through hills and heavy bamboo jungles. At 631 m. **Darekasa** is on the watershed of the Narbada and Mahanadi river basins, a pass with a tunnel at the summit. Next comes, 647 m. from Bombay, **Dongargarh** (R.). Hotel, an engine-changing station, with a considerable European population connected with the railway. There is a guest-house in the town. The ruins of a fort are on the N.E. face of a detached hill, some 4 m. in circuit. There are tanks for water supply, but no buildings.

708 m. from Bombay, **Raipur** junction (alt. 995 ft.). N.G. ry. to Abhanpur Jn. and Dhamtari (35 m.). The chief town of a District of the same name, and the headquarters of the Commissioner of *Chattisgarh*. Of the *Fort*, built by Raja Bhubaneswar Singh in 1460, no trace now remains except isolated mounds. The

Burha Tank, on the S., the same age as the Fort, covered nearly 1 sq. m. The public gardens are on its E. shore. There is a Raipur Museum The *Maharajbandh Tank* was constructed by a revenue farmer in the times of the Mahrattas, and close to it is the temple of Ramchandra (locally known as the Dudhadhari temple), built in 1775 by Bhimbaji Bhonsla. In the centre of the town is the *Kankali Tank*, constructed of stone throughout, at the close of the 17th century About 2 m. to the S is the Rajkumar College, for the education of the sons and relatives of notables of Bihar, Orissa, and the Central Provinces

From Raipur a broad-gauge ry., crossing the Mahanadi river at 26 m. by a bridge 2624 ft long (1929), runs 290 m through very broken country to Vizianagram junction (p. 507), on the Coromandel coast At 133 m the bridge over the Tel river is 2158 ft. long (1932)

777 m **Bilaspur** junction (R.) (alt 885 ft.) Big game in the N and Central parts of Bilaspur District Motor supplies available at Bilaspur.

Branch N.W (opened 1891) through a mountainous district and the coalfields of *Umaria* to 198 m **Katni** junction, on the G.I.P Railway (p 46) This branch passes at *Pendra Road* station under the **Amarkantak** plateau (3500 ft.), where the Narbada, the Son and Mahanadi rivers have their sources. There are several temples and a "Kund" or reservoir enclosing the Narbada spring. The plateau is frequented by the "tirth bàsis" and other pilgrims. The scenery between Khodri, S. of Pendra, and Khongsara is notable.

About 15 m. N.E. of Bilaspur is the precipitous *hill of Dalha*, 2600 ft. high, rising sheer out of the plain.

15 m. N. of Bilaspur is **Ratanpur**, the old capital of the formerly self-contained kingdom of *Chattisgarh, or the Thirty-six Forts*, in which are now included the Districts of Raipur, Drug, and Bilaspur. Kargi Road station, on the Katni branch, is a few miles from Ratanpur The town lies in a hollow surrounded by hills. It ceased to be the capital in 1818, but the crumbling arches of the old fort, the broken walls of the ancient palace, and the half-filled-up moat which surrounded the city, recall its former condition The Brahmans of Ratanpur are still the leaders of their class all over Chattisgarh The numerous small temples in the vicinity are scattered over an area of 15 sq. m A temple at Pali, 13 m N.E. of Ratanpur, is protected under the Ancient Monuments Act There is at Ratanpur a large number of fine mango groves, with numerous tanks and temples scattered amidst their shade. Great blocks of masonry of uniform shape commemorate distinguished satis (*suttees*). The most prominent of these is near the old fort, where a large building records that there in the middle of the 17th century twenty ranis of Raja Lakshman Sahi devoutly fulfilled the duty of self-immolation

802 m. **Naila** Stn At Janjgir, 1½ m. S., is a temple protected as an ancient monument Before reaching

809 m. **Champa** station the Hasdo river is crossed by a bridge 1192 ft long The stream cuts the coalfields of **Korba** some 20 m. N. of the railway.

At 844 m. the **Mand river** is crossed by a bridge 1073 ft long.

859 m. **Raigarh**, capital of a small feudatory State.

890 m. **Belpahar** station, after leaving which the Ib river (boundary of Orissa), which flows S into the Mahanadi river, is crossed by a bridge 1451 ft. long (1890).

898 m **Ib** station on the E. bank. Before crossing, there is a siding to the Rampur colliery in village Lamptibahal, about 2 m from Ib station

903 m **Jharsuguda** junction station There is a P.W.D. Inspection Bungalow, which may be available to travellers if not occupied by local officers Flint implements have been found.

Branch (opened 1893) to **Sambalpur** (alt. 484 ft , D.B and *Circuit House, available for travellers*), distant 30 m Near here diamonds of considerable value have been procured They are said to be found in the bed of the Mahanadi upstream from the town. In 1766 Motte was sent to explore for sources in Orissa

From Jharsuguda the railway takes a N E course, and continuing through a well-inhabited plain country to

909 m **Dhutra** and at

916 m. **Bagdehi** station, it enters the hills, in which it continues until the plains of Bengal are reached.

936 m. **Garpos** station Hereabouts the forests are very dense, and in the rainy season they are largely resorted to by wild elephants.

Between 958 m **Kalunga** and **Panposh** the Brahmani river is crossed : the bridge is 1506 ft. long (1892). The local people used to wash the river-sands for gold ; but they prefer to work in the limestone quarries and manganese mines of the Gangpur State The view upstream is very grand when the river is in flood, at the confluence with the Sankh River

991 m. **Manharpur** station. Here the railway enters the **Saranda** forests, which contain some of the finest sal trees (*Shorea robusta*) in India The line winds round hills, passing close under them on both sides. The summit of the range is reached through a heavy cutting leading into a tunnel. Traffic in ironstone, limestone, timber and sabai grass for paper manufacture has expanded. The inhabitants of these wilds are nearly all aboriginal Hos or Mundas A light ry. runs from Manharpur to the vast iron-ore deposits of Saranda, which are mined by the Bengal Iron Company.

1029 m **Chakradharpur** station, (D B K), a large railway settlement and engine-changing station. The town is also increasing in size and importance, as it is a centre for the timber trade There is a D.B with a khansama near the railway station The main road connecting Patna with Cuttack runs through Chakradharpur. Starting from Chakradharpur a very pleasant motor trip can be made to Ranchi (72 m) and thence to Hazaribagh, Gaya and Patna. The road to Ranchi is metalled and bridged throughout, and rising about 1500 ft between the 64th and 40th m runs through very picturesque forest scenery From Chakradharpur also it is possible to motor to Jajpur Road on the Madras branch of the B.N. railway The road passes through Chaibasa (16 m.), the headquarters of the district, and is metalled and bridged as far as the Baitarni river (52 m), which forms the boundary between the district of

Singhbhum and Keonjhar State. The Baitarni river is bridged, and thence there is a good gravelled road passing through Keonjhar to Jajpur.

Chaibasa (alt 754 ft.), headqrs of Singhbhum district, is situated about 16 m. to the S.E. A service of motor omnibuses (S. 1½ hr.) connects it with Chakradharpur. It is also reached by rail (12 m.) from Amda (see below). Accommodation at the D.B. where there is a khansama. The country round Chaibasa is inhabited by the aboriginal race of Hos or Larka Kols. Palaeolithic finds in the neighbourhood.

1042 m. **Raj Kharsawan** junction (Amda). A branch line of the B.N. Ry. runs through Chaibasa (12 m.) to Gua (65 m.) in the S. of the district where a very large and rich hæmatite deposit is being worked. There are also manganese and chromite deposits near Chaibasa.

1051 m. **Sini** junction, a branch (the original line of the B.N.R. opened 1889) runs N.E. to Asansol, on the E.I.R., while the main direct line runs E. to **Kharagpur** and **Howrah**.

Sini Junction to Asansol

On the line from Sini Jn. to Asansol are the following stations:—

17 m. from Sini, **Chandil** station. Before this place is reached the hills close in on the line. Dalma hill, 3060 ft. above sea-level, is seen 12 m. E. Labourers for the tea-cultivation in Upper Assam and Cachar are recruited from this tract in small numbers owing to development of local cultivation of lac. After crossing the Cossye river

31 m. from Sini, **Barabhum** Station, for Balarampur, where there are several shellac factories.

50 m. **Purulia** Station. Headquarters of the Manbhum district, through which the traveller has been passing for many miles.

From here a N.G. line runs to Ranchi (41 m.) and (82 m.) to Lohardaga (see below). 67 m. the Subarnarekha river.

75 m. **Adra** Jn. (R.). Here the Kharagpur-Bankura-Gomoh line of the B.N.R. crosses the main line. 16 m. from Gomoh the Evelyn bridge, 1640 ft. long (1907), crosses the Damodar river. At Mohuda, 14 m. from Gomoh, a branch runs to Barkakana (see below), the Ry. colliery at **Bokaro**, near Bermo stn. on this line, is a quarry with 80 ft. of solid coal-face and an estimated content of 70 million tons. From Bankura, 33 m. S.W. from Adra, a N.G. ry. runs 60 m. E. to Ratnagar, on the bank of the Damodar R.

101 m. from Sini **Asansol** junction station (D.B. and Inspection Bungalow). About 6 m. before Asansol is reached the river Damodar is crossed on a bridge 2364 ft. long (1890). From Asansol to Calcutta, a distance of 132 m., the traveller proceeds by the East Indian Railway (see p. 65).

Sini Junction to Ranchi and Kharagpur

On the main direct line from Sini Jn. to Kharagpur (opened 1898), the first station of importance after crossing the Kharkai river is —

1068 m. from Bombay, **Tatanagar**, for the great industrial centre of Jamshedpur, where the parent company of Tata's Iron and Steel Works is now the centre of a ring of industries, covering tin-plates,

agricultural implements, jute machinery, enamel ware, locomotive parts, etc. Pop. (1941) 148,711 and growing rapidly. At night there is a blaze of light.

From Tatanagar a branch runs (95 m.) to **Barkakana** a few m W. of Ramgarh in the Damodar valley; and thence to **Daltonganj** (p 55), and Son East Bank

At **Muri** (59 m. from Tatanagar on the Barkakana branch) is the junction with the line from Purulia (see above) to Ranchi and Lohardaga. The journey (262 m) from Howrah to Ranchi by this route (*viâ* Kharagpur, Tatanagar and Muri) takes 12 hrs. daily from Howrah)

Ranchi * (2138 feet above sea level) is the summer capital of the Government of Bihar, which is in residence here from May to October, and the headquarters of the Commissioner of the Chota-Nagpur Division.[1] The climate in the hot weather has little advantage over the plains, but in the rains and cold weather it is excellent There are two hotels and two boarding-houses. The B.N. Ry. Co.'s hotel (electric light and good cuisine) is opposite the ry station; the Grand Hotel is on the Main Road Taxis can be obtained, and there are five or six dealers in petrol and several repair garages The Club will admit as temporary members visitors who have the necessary credentials There are two golf courses, one good, the other indifferent, both belong to the Club, but visitors staying at the Railway Hotel have the right to play on them. Ranchi is the seat of a missionary bishop of Chota Nagpur, Church of England, and there are three missions, S.P.G., Lutheran (Bethesda Girls' School), and the R.C. Mission, which, under the Archbishop of Calcutta, maintains an Apostolic School, a High School and Elementary Schools, as well as a convent and a boarding-school for girls. The S.P.G. have also good schools and a handsome church The Sunday services at the Protestant and R.C churches are largely attended by the Christian Kols, and are interesting. At the schools of both these missions aboriginal women are taught to make lace Gurkha military police are stationed at Doranda, the old Cantonment (2 m.)

The motorist will find an admirable centre for excursions in Ranchi, also excellent metalled roads, with bridges, connect with Hazaribagh (58 m.), from which place (42 m) Hazaribagh Road stn on the E I.R. Grand Chord Line (p 58) can be reached. Purulia (96 m), Chaibasa (88 m.) and Lohardaga (46 m.), the terminus of the ry line from Purulia and the old district headquarters The last-named road continues (96 m) to **Neterhat**, a small plateau (3700 ft.), where there are four fully furnished *Inspection Bungalows*; when not required for official use, these are available to the public, on application to the Deputy-Commissioner at Ranchi. The Daltonganj road branches off from the Lohardaga road at Kuru (35 m) and is suitable for motors throughout the year. Public motor-lorries run to Hazaribagh, Gaya, Chaibasa, and Lohardaga; arrangements can be made for first-class passengers. In addition to the places mentioned, the following are accessible by motor-car: Jamshedpur, Giridih,

[1] For this interesting part of India Mr Bradley Birt's *Chota-Nagpur* (John Murray) may be consulted

Dhanbad and Calcutta, and also Jajpur Road stn. (for Cuttack) on the B.N. Ry. main line from Calcutta to Madras (Route 25).

At Kanke, 5 m. from Ranchi, is a Mental Hospital, the largest of its kind in India, with separate blocks for Europeans and Indians. Lac Research Institute, investigating lac, the great local industry, has been established at Namkam (4 m from Ranchi) where there are Bishop Westcott schools for boys and girls At Itki (14 m from Ranchi on the ry. to Lohardaga) there is a tuberculosis sanatorium There is a fine waterfall at Hundru, 28 m from Ranchi; the first 14 m of the road are metalled and the remainder gravelled There are waterfalls at Jonah and Bhera, temples at Jagannathpur (5 m) and Rajroppa The Ichadag sanatorium bungalow is 23 m. from the ry station McCluskieganj (1935) is an Anglo-Indian colony

From Tatanagar, the main line crosses the Subarnarekha river just before reaching

1084 m. from Bombay and 139 m from Howrah, **Galudih**. Near lie several copper mines. On the railway there are large copper works with mill, refinery and by-product recovery plant Extensive deposits of copper sulphide exist in the hills running S.

1151 m from Bombay and 72 m. from Howrah, **Kharagpur** (p. 492) jn. for the B.N. Ry main line to Madras (Route 25), and, 1223 m. from Bombay, **Howrah**, the Calcutta joint E I and B N. Ry. terminus (Route 6).

ROUTE 8.

KHANDWA to AJMER by **Mortakka** (for **Omkarji**), **Mhow** (*for* **Mandu** and the **Caves of Bagh**), **Indore**, **Ujjain**, **Ratlam**, **Nimach**, **Chitorgarh** (for UDAIPUR) and **Nasirabad**

353 m from Bombay on the G I P. Ry main line to Calcutta (Route 2) is **Khandwa** (p. 43), the starting-point of the B B.C I. Ry (metre-gauge), which passes through Ratlam to Ajmer, and connects there with the metre-gauge mail route to Jaipur and Delhi (Route 10). This line was opened to Choral (p 146) in 1875, to Mhow in 1878, and to Ajmer by 1881.

38 m from Khandwa **Mortakka** station, the Narbada river is crossed by a railway bridge 2836 ft. long (1876). A road bridge is proposed The river is the boundary of the Indore State with the Central Provinces and Berar and formerly separated the Deccan (Dakshinapath) from Hindusthan (Aryavart). The neighbourhood abounds in large game.

A road (motor service, S) leads 6 m E. to **Mandhata**, more properly called **Omkarji**, which can be visited from Mhow. The trip will easily occupy a whole day.

In the Puranas the place is called Omkar Kshetra *The Great Temple of Omkar* is situated in the island of Mandhata, in the Narbada It is said that the hill was originally called Baidurya Mani Parvat, but its name was changed to Mandhata as a boon from Siva to Raja Mandhatri, the seventeenth monarch of the Solar Race,* who performed a great sacrifice here to Siva.

The island is about 1½ m. long

and the area is five-sixths of a sq. m., and a deep ravine cuts it from N. to S. At the N. the ground slopes gently, but terminates at the S and E in precipices 500 ft high At this point the S bank of the Narbada is equally steep, and between the cliffs the river is exceedingly deep and full of crocodiles and large fish. The village is built partly on the S bank of the river and partly on the island It is most picturesque, the rows of temples, houses and shops standing on terraces with the Raja's palace overhanging the rest

On both sides of the river, which is crossed by a private ferry, the rocks are of a greenish hue, very boldly stratified, with remains of fortifications erected by ancient Rajas It is said that the Temple of Omkar and that of Amreswar, or Manileshwar, on the S bank of the river, are two of the twelve great Sivite temples which existed in India when Mahmud of Ghazni destroyed Somnath in 1024 A.D. The S banks were overgrown When the Peshwa Baji Rao II desired to repair the temple it could not be found, so a new one was built, with a group of smaller ones Afterwards part of it was found, and the late Raja of Mandhata built a temple over it, but the sanctity and name of Manileshwar have been appropriated by the Peshwa's temple

The Raja of Mandhata, who is hereditary custodian of the temples, is a Bhilala (of mixed Rajput and Bhil descent), and claims to be the direct descendant of the Chauhan Bharat Singh, who took Mandhata from Nathu Bhil in 1165 A.D. The old temples have been damaged by Muslims, every dome has been overturned and every figure mutilated. The gateways are finely carved.

The oldest temple is on the *Birkhala rocks* at the E. end, where devotees used to cast themselves over the cliffs from Puranic times up till the year 1824. The junction of the Kavari with the Narbada was also favoured for this meritorious self-sacrifice, according to the Puranas. The temple consists of a courtyard, with a veranda and colonnades supported by massive pillars boldly carved On the hill are the ruins of a very fine *Temple to Siddha Nath*, which stood on a plinth 10 ft. high Round the plinth was a frieze of elephants 5 ft. high, carved in relief on slabs of yellow sandstone; all but two are mutilated. The temple is an Ancient Monument.

In front of the *Temple to Gauri Somnath*, on the hill at the W is an immense Nandi carved in a green stone, and 100 yds farther is a pillar 20 ft. long On the island itself all the temples are Sivite, but on the N. bank of the Narbada are some old temples to Vishnu, now in ruins, and a group of Jain temples, called Sidhvar Kut On the S bank is a temple of Brahma, without a figure Where the river bifurcates are some ruined gateways, and a temple of Varah, on which are twenty-four figures of Vishnu well carved in green stone. In the middle is a large figure of the boar Avatar. On an image of Siva in the same building is the date 1346 A.D. Farther down the bank, in the ravine, is a prostrate female figure (wrongly called Ravana, really Chamundi), 18½ ft. long, with ten arms holding clubs and skulls On its chest is a scorpion, signifying the pangs of hunger, and at its right side a rat, and one foot rests on a prostrate human figure

The bed of the ravine is covered with huge basalt blocks slightly carved The *Jain Temples* stand on an eminence a little back from the river. The largest is on a

plinth of basalt 5 ft. high. The E. wall is still complete. On each side of the doorway is a figure with Saivite and Jain emblems curiously intermixed.

Gandpad, the guru of Shankaracharya, lived here, and Nanak the Sikh guru paid a visit. It is said that a demon Hedamb haunted the place In the Skand Purana Kavar performed a sacrifice at the confluence with the Kavari

There is a fair at the Shrivratri festival (Feb.-March), and another in November at the Kantik Purmina According to a prophecy the sanctity of the Ganges expired in 1899 and was transferred to the Narbada

41 m. from Khandwa is **Barwaha** station (D B.), the seat of a palace of His Highness the Maharaja Holkar (no admission) A metalled road runs from here (44 m. W) to Maheshwar (D.B.), until 1738 the capital of the Holkars, in Nimár District, on the banks of the Narbada, where is the magnificent **Chhattri** of Ahalya Bai (died 1795), widow of the son of Malhar Rao Holkar Sir John Malcolm said "She sat every day for a considerable period in open darbar transacting business Her first principle of government appears to have been moderate assessment and an almost sacred respect for the native rights . . She heard every complaint in person, and although she continually referred causes to courts of equity and arbitration and to her Ministers for settlement, she was always accessible . . . Her charitable foundations extend all over India, from the Himalayas to Cape Comorin, and from Somnath to the Temple of Jagannath." She had the courage to watch her daughter become *sati*, after vainly seeking to dissuade her.

At Maheshwar a prehistoric city, more than a mile long and perhaps older than those in the Indus valley, has been excavated (1946)

58 m. from Khandwa is **Choral** station. From this point the ascent of the Vindhya Range commences on a grade of 1 in 40 and continues almost into Mhow The scenery is striking On approaching

71 m. **Patalpani** station, the waterfall of that name is passed.

74 m. **Mhow** * station (R.), D.B. (13 m from Indore), in the territory of the Maharaja Holkar (alt 1926 ft above sea-level) on the watershed of the Narbada and Chambal basins Troops are stationed here as provided in the Treaty of Mandasor of 1818 with Malhar Rao Holkar II Mhow is a centre for many excursions

From Mhow an expedition of 55 m. may be made S W. to the ruined city of **Mandu**, capital of the Muslim kingdom of Malwa It is in the State of H.H the Maharaja of Dhar, a Mahratta prince, Maharaja Anand Rao Puar (b 1920, succ 1926).

The State was founded by Anand Rao Puar I , to whom it was assigned by the Peshwa Baji Rao I (1734)

The best route to Mandu is by motor through the town of Dhar (33 m), D.B. An alternative route of 58 m is *vid* **Manpur** (13 m from Mhow), which is 12 m from Gujri (Insp Bung) on the Agra-Bombay road ; it has the advantage of beautiful scenery A third route (78 m.) is from Ratlam (p. 151) along a good metalled road. Motors can pass

right into the old fort and, except in the rains, as far as the palace of Baz Bahadur. If it is proposed to stay at Mandu, intimation should be given to the Diwan of Dhar State two days before, when the D.B. in Mandu will be made available

It is possible to see all the main buildings and return to Mhow the same day On arriving at Mandu it is most convenient to drive right through the ruins to the farthest point close by the pavilion of Rupmati, then work back to the Barnes Kothi, a rest-house (food and bedding, if necessary, must be brought) and situated near the centre of the ruins Between the months of June and November the locality is very unhealthy

Dhar, once capital of Malwa, founded by Raja Bhoj from Ujjain, contains several half-ruined mosques. Outside the N. wall of the Lat Masjid at Dhar, 1405 A D., lies a lat, or pillar of wrought iron, thought to have been originally a pillar of victory Jahangir in his diary stated that Bahadur Shah of Gujarat ordered it to be removed, but in this process it fell and broke in two: the smaller part, 13 ft. long, has disappeared; the larger part, 22 ft long, remains *in situ*, partly buried in the ground

Dilawar Khan Ghori, appointed Governor (1387), assumed the title of Sultan (1400) and moved to Mandu

Mandu[1] (1944 ft), originally 37 m. in circumference and 20 sq m. in area, now occupies 8 sq. m of ground, extending along the crest of the Vindhyas, and is separated from the tableland, with which it is on a level, by a deep valley crossed by a causeway, above the Southern side of which the battlemented walls and gates of the old city rise. The perimeter follows a contour serrated by ravines.

Paths have been cut to all the ruins of interest, the chief being the *Jami Masjid* (1454 A.D.), less injured than any of the others, and said to be the finest and largest specimen of Afghan architecture extant in India The courtyard is 90 yards sq and is surrounded by a double colonnade. The mosque proper consists of five aisles of seventeen bays. To the W. of the mosque a second enclosure contains the fine white marble tomb of Alif Khan Hoshang Shah Ghori (1406-35) Facing the Eastern entrance to the mosque are remains of the mausoleum of Muhammad the Great, and at its N W. angle is the lower part of a circular tower of victory, formerly 7 storeys high.

Between it and the great arched gateway in the Northern wall of the city are a number of ruined palaces and courts, including the **Jahaz Mahal**, or Ship Palace, which takes its name from the lakes between which it stands

Staffed entirely by women, it consists mainly of three great halls, with a beautiful little bath at the N end there is a fine view over the city from its roof Close by is the **Hindola Mahal**, a hall of fine massive proportions Farther W. are the **Champa Baori**, a well with subterranean retreats for hot weather, and the remains of some baths.

Two miles S E. is the *Palace of Baz Bahadur*, Bayazid, the last king of Malwa (1555), and on rising ground near by stands the pavilion of Rupmati, his wife.[1]

[1] The most comprehensive book on the subject is, *Mandu, The City of Joy*, by G Yazdani (Oxford University Press, 1929, 8s. 6d.).

[1] For the story of Rupmati and Baz Bahadur, see *The Lady of the Lotus*, by L. M. Crump (Oxford University Press, 2nd ed , 1928).

From here there is a splendid view Southwards across the Narbada valley, 1000 ft. below.

S.W., near the inner citadel of Songarh, is a quaint ravine with temples and a small tank, specially mentioned in the memoirs of the Emperor Jahangir These buildings are still very striking on account of their massive proportions

The fortifications were constructed by Hoshang Shah Ghori, in whose time the city attained its greatest splendour In 1526 Mandugarh was taken by Bahadur Shah, ruler of Gujarat, and annexed to his dominions, of which it remained part until their conquest by Akbar in 1567 Sir Thomas Roe, the Ambassador of James I. of England, entered Mandu in the train of Jahangir, part of the triumphal procession of the Great Mughal being 500 elephants He complains of the lions which then infested the country, and killed one of his baggage ponies. There is good reason to believe that they really were lions, not tigers. The Rulers of Mandu and Chitor were at feud with each other for many years

The **Caves of Bagh** are in the Gwalior State, 30 m. W. of Mandu. Motor service (S.) (87 m.) to the caves, through Dhar and Sardarpur, formerly a British Cantonment (travellers' bungalows at convenient stages), there is a small R H near them and also a comfortable State Inspection Bungalow in the village of Bagh (5 m.); no permit necessary It would be as well to consult the Superintendent of the Archæological Dept. at Gwalior as to arrangements. The village of Bagh is situated on the Bagh river, in a valley 800 ft above sea-level on the S. slope of the Vindhya range. To the S at the foot of a hill is the Baghesvari temple, which has been reconstructed from portions of a 12th-century building

The Caves,[1] E. of the village, were originally more numerous, but some are blocked by their fallen roofs They are known locally as the *Panch Pandu* or *Pandava Gupha*, the Buddhist figures in the second cave being wrongly supposed to represent the five Pandava brothers. The excavations are in the face of a sandstone hill and occupy a frontage of 700 yds. They are manifestly Mahayana, dating 400-700 A D All are *viharas*, or monasteries, a small chamber at the back forms a *chaitya* or chapel, and the cells are at the sides Cave No 1, at the extreme N E of the cliff, is probably the earliest, with a dagoba Cave No. 2 (the Gossain's Cave) is the most complete of the series, although the paintings have been obliterated by smoke and bats It is approached by a steep flight of steps. There are eighteen cells round the cave Two groups of well-executed figures stand on the sides of the antechamber representing a Buddha and two attendants Two *dwarpalas*, or guardians, are placed on either side of the entrance to the sanctum This is the only cave in which there are stone figures.

No. 3 (*Hathikhana*, or Elephants' Stable) contains paintings of the Buddha with kneeling worshippers (their race not identified) on the walls of the chamber on the N E side of the hall, which is fronted by a pillared vestibule Between this cave and the next are 200 yds of solid rock.

[1] See *The Bagh Caves*, a comprehensive account, with illustrations of the paintings, published by the India Society in 1927: also *My Pilgrimage to Ajanta and Bagh*, by Mukul Chandra De (1925)

Cave No. 4, which has a common portico with No. 5, is the most magnificent of the series, and is known as the Rang Mahal or Painted Hall The portico is covered with paintings of kings, priests, horsemen, elephant riders, dancers and attendants. Copies are in the Archæological Museum at Gwalior and also at the British Museum A colossal figure, a King or Yak sharaja, is seated in a recess 13 ft high outside the portico

Cave No 5 would appear from its shape to have been a lecture-hall (*shala*) or refectory. Cave No 6 was evidently purely residential it is entered by a small ante-chamber from No 5. In 1910 signs of frescoes were visible in Cave No 7, which is 45 ft. away from No 6, but it has now collapsed Caves 8 and 9 are also blocked up 2 m N E of the Caves is the half-ruined shrine of a 12th-century Hindu temple of Siva

87 m from Khandwa **Indore** station (D B), aerodrome, alt 1805 ft, capital and residence of the Agent to the Governor-General for Central India The State covers an area of 9902 sq m The principal chiefs of the House of Holkar have been Malhar Rao (d 1766), the founder (1733), Ahalya Bai (1767-95), widow of his son Khande Rao, Tukoji (1795-7), her general, Jaswant Rao (d 1811) Malhar Rao II (d. 1833) · Tukoji Rao II (1852-1886) · and Shivaji Rao (abdicated 1893) In February 1926 H.H. Maharajadhiraj Raj Rajeshwar Yashwant Rao Holkar, Sawai Sri Bahadur, G C.I E (b. 1908), succeeded on the abdication of his father

Indore (population 203,695), built by Ahalya Bai, stands on the banks of the rivers Sarasvati and Khan. It was destroyed in 1801, but recovered.

The *Old Palace*, with many-storeyed gateway, faces the chief square On the N. of it and, separated from it by a street are the *New Palace* and garden. On the S side of the square is the *Anna Chhattra* (alms-house), where food is daily distributed to the poor

In the streets are some good timber houses, with deep recessed verandas, and carved corbels and pillars To the W of the Old Palace is the *Saraja Street* of the Marwari money-lenders, and close by are the *Haldi Bazar* and the *Aditvar* or Sunday Street, where a market is held on Sundays

On the W bank of the Khan, near the bridge, is a statue of Sir Robert Hamilton (1802-1887), who was A G G in the years preceding the Mutiny. On the riverside are numerous Chhattris erected to the memory of members of the Holkar family The most important of these are on the Western outskirts of the town

In the *Chhattri Bagh*, an oblong enclosure surrounded by a battlemented wall, are the cenotaph of Malhar Rao Holkar I., richly ornamented with sculpture in low relief; a smaller one of Ahalya Bai (see p. 146), and one to her son Male Rao Holkar (died 1766) this is a twelve-sided building on a rectangular plinth also delicately ornamented with low relief sculpture. A similar walled enclosure a few hundred yards farther down the Sarasvati river contains the Chhattri of Maharaja Hari Rao Holkar IV. (d 1843).

Of modern buildings in the town the principal are the *King Edward Hall*, opened 17th November 1905, by King George V (then Prince of Wales), whose visit is commemorated by the new *Courts of Justice*; the *M R. Tukoji Rao Hospital*, and the *City High School* There are also some flourishing cotton-mills. The *Institute of Plant Industry* has a physiological

laboratory and a silage plant. A Hindi University is projected.

S.W. of the town is the *Lal Bagh* palace (the principal residence of the Maharaja), standing on the banks of the Sarasvati, amongst well-wooded gardens and grounds. 1 m. from this palace is the *Manik Bagh*, where the guests of the State are entertained; and 1 m. farther (S. of the town) is *Holkar College*. There is a Museum in the Nara Ratna Mandir.

Adjoining the town, on the E., is the **British Residency**, an area assigned by treaty, but retroceded in 1931, containing the houses of the Resident and his staff, quarters of the Malwa Bhil Corps, the *Post Office*, the *Anglican* and *R C Churches*, the *Presbyterian Church of Canada*, the *King Edward Hospital*, with 160 students, the *Daly College*, and a beautiful *Park* and *Garden* through which flows the river Khan. Daly College, which was instituted for the education of Indian princes and nobles, is a fine marble building with a large hall and contains a series of portraits of Indian princes by Herbert Olivier.

About 3 m. to the S.W. of Indore is the unfinished palace of *Shirpur*. In the same neighbourhood a large Blackbuck preserve is maintained, and 1 m. beyond is Sukhnewás, a pleasure palace.

In 1857 some of the State troops rose and attacked the Residency House, and also the Cantonment of Mhow on 1st July. The A.G.G., Colonel Durand, who had arrived at Indore only on 14th May, and the Europeans with him, were compelled, after a fight, to retire to Sehore and Hoshangabad. The Maharaja (Tukoji Rao Holkar II.), aged only 15, gave assistance and refused to surrender a number of Christians to whom he had given sanctuary in the palace. Captain Hungerford, with the Maharaja's help, drove the mutineers off from Mhow and remained there until a Bombay force arrived on 14th December.

112 m. from Khandwa is **Fatehabad** junction (R.), where Aurangzeb defeated Jaswant Singh of Jodhpur (1658) on his march to usurp rule. From here a short M.G. branch of 15 m. runs to

Ujjain (R.) (D.B.), 23 m. N.W. from Dewas,[1] on the Agra-Bombay road, and 42 m. S.S.W. from Agar, a former Cantonment of the Central India Horse. Junction for the G.I.P. Ry. broad-gauge line (114 m.) from Bhopal, and its prolongation (24 m.) to Nagda, where it meets the B.B.C.I. Ry. main line from Bombay to Delhi.

This famous city (the Greek Ὀζήνη), one of the seven sacred cities of the Hindus (p. 80), is situated on the right bank of the river Sipra, which, rising in the Vindhyas, falls into the Chambal. The principal bathing festival is the Kumbh Mela, celebrated triennially at Hardwar (p. 412), Allahabad (p. 47), Nasik (p. 37) and Ujjain; it is held here every twelfth year. The old name of Avanti, by which it was formerly known, was also applied to the Malwa country, of which it was once the capital. It stands in N. lat. 23° 11′ 10″, the first meridian of Hindu geographers. It is said to have been the seat of the viceroyalty of Asoka during the reign of his father at Pataliputra, now Patna, about 275 B.C. It is, however, best known as the capital of the legendary Vikramaditya (Valour's sun), long believed to

[1] There are two Maharajas of Dewas, of the senior and junior branch. Both are Mahrattas (Puars) of the same caste as the Maharaja of Dhar (p. 147).

be the founder of the Samvat era. He was fabled to have driven out the Scythians, and to have reigned over almost all N. India, and at his court were said to have flourished the Nine Gems of Hindu literature — viz, Dhanvantari, Kshapanaka, Amarasinha, Shanku, Vetalabhatta, Ghata-karpara, Kalidasa (of European celebrity), Vararuchi, and Varaha-mihira

The Paramara king Bhoja (1010-1060) removed the capital to Dhar. Altamsh of Delhi captured Ujjain in 1235 and destroyed a famous temple of Mahakal The whole province of Malwa was conquered by Ala-ud-din Khilji, who reigned at Delhi 1295-1317 A.D In 1387 A D. the Muslim governor, Dilawar Khan Ghori, declared himself independent and moved to Mandu In 1531 Malwa was conquered by Bahadur Shah, King of Gujarat, and in 1562 by Akbar In 1658 the decisive battle between Aurangzeb and Murad and their elder brother Dara was fought near this city In 1732 the Mahrattas conquered Malwa, and Ujjain was awarded to Ranoji Rao Scindia to support his troops, remaining the capital of Scindia until 1809, when Daulat Rao Scindia removed to Gwalior

In 1792 Tukaji Holkar took Ujjain, and burned part of it

Ancient Ujjain lay to the N on high ground known as *gadh* (fort), along the right bank of the river Sipra At the Vaishya Takri (4 m N E) a large stupa has been unearthed, cremated bones and skeletons found, with coins dating 100-300 A.D. The *nagara* (town) and *vana* (forest) have exchanged places, for the modern city stands on the Mahakalavara (grove of Mahakal). The change probably occurred about 1300. The modern city, oblong and 6 m. in circumference, was once surrounded by a stone wall. It is lighted by electricity. Near the palace of Maharaja Scindia is an ancient gateway, said to have been part of the enclosure of the Mahakal temple. To the S W of this are the picturesque ghats and temples on the river, and outside the city to the S E. are the remains of the **Observatory**, erected, while Governor of Malwa (1728-34), by Maharaja Jai Singh II. of Jaipur (p 221). 5 m. to the N. of the town is a restored Water Palace (Kaliadah) of the Sultans of Mandu on an island in the Sipra river H H the Maharaja of Gwalior occupies it on his visits to Ujjain

161 m **Ratlam** junction (R good) (D B K) of the B.B. and C.I. Ry , B G line from Bombay (*viâ* Baroda, Godhra, Nagda, Kotah, Bharatpur and Muttra) to Delhi (mail route), and of the (metre gauge) section of the B B.C I Ry from Ajmer to Indore, Mhow and Khandwa junction Ahmadabad, 153 m , can be reached by a branch line (1894), from Godhra to Anand, and Ujjain and Bhopal by a branch (1896) from Nagda. Ratlam is the capital of Maj.-Gen H.H Maharaja Sir Sajjan Singh, G.C I E , K.C.S I , K C V O

The State was granted by Shah Jahan to Ratan Singh, great-grandson of Udai Singh, Maharaja of Jodhpur Ratan Singh was killed at the battle of Fatehabad, near Ujjain (1658), in which Jaswant Rao Rathor, with 30,000 Rajputs, fought the combined armies of Aurangzeb and Murad His outstanding valour is recorded in Tod's *Rajasthan* The Maharaja's Ranjil Bilas palace is within the walls. There is a Chauk or square built by Munshi Shahamat

'Ali. Beyond this is the Chandni Chauk of the bankers, which leads to the Tripulia Gate, and the Amrit Sagar tank A road connects with Mhow, 78 m., Dhar, 56 m.; Mandu, 78 m; and Indore (*vid* Mhow), 92 m Inspection Bungalows, with glass, crockery, and cutlery, are situated at intervals of about 10 m.: one of these, at Sardarpur, formed part of an old "water-palace." D.Bs (with khansamas) are at Dhar, Mhow, and Indore

181 m. **Jaora**, the capital of a Muslim State, created by the Treaty of Mandasor (1818) confirming grants of land to Ghafur Khan, brother-in-law of Amir Khan, by the Indore government The present chief is Lt.-Col H. H. Nawab Sir Muhammad Iftikhar Ali Khan Bahadur, K C.I.E (born 1883, succeeded 1895). The palace is called Machhi Bhawan

213 m **Mandasor** (Mandsaur) station (D.B), in Gwalior State, on the Mhow-Nimach road, 133 m. from Mhow and 30 m from Nimach, where, in 1818, after a defeat at Mahidpur, a treaty was made between the British and young Malhar Rao Holkar II Severe fighting occurred here in 1857 between the rebels and brigade of British troops moving from Mhow to relieve Nimach. The place was originally known as Dashapura, "the township of the ten hamlets," supposed to have been built by Dasarastra, son of Rama

Discoveries have been made by the Archæological Dept., Gwalior State. In a field at Sondni, about 2 m. S E. of the fort, are preserved two monolithic sandstone pillars, over 45 ft. high, with lion and bell capitals and bearing inscriptions (542) reciting the glories of Yasodharman, King of Malwa, who defeated Mihira-Kula, the Hun adventurer (about 528 A.D.); also of Naravarman (404) and of Banduvarman (437-73), now at Gwalior, two images of Ganas (attendants on Siva) of the same period, and found in the same field. A remarkably fine statue of Siva of the 6th century stands in the Fort, and here also is a carved pillar of a temple gateway Both are admirable specimens of the Gupta period (6th century A D)

243 m. **Nimach** (Neemuch) station (R) (D B), Cantonment N W In 1857 a brigade of the Bengal army mutinied and marched to Delhi The European officers were besieged, until relieved by a brigade from Mhow Some ladies found refuge at Udaipur (p. 156) To the E are Rampura (32 m) and Bhanpura (52 m, chhattri of Jaswant Rao Holkar)

At Khor in the Gwalior State, 15 m. N.W. by a good road, are ruined temples of which a Nautoran (nine arches) is of interest Khor can be reached also by a good road (4 m N) from Kesarapura Ry station next to Nimach on the N.

278 m from Khandwa is **Chitorgarh** junction (alt 1338 ft.) (Branch to Udaipur, 69 m.). The **Fort** [1] crowning the rocky ridge, running N. to S. on the E. of the line, is about 3 m distant (2 m. to the foot; 1 m. ascent). No permission necessary, but it is desirable to inform the Hakim of Chitor (the district official) by letter in advance of arrival There is a small D B about ½ m. from

[1] For a striking account of this wonderful Fort, see *The Naulakha* and *Letters of Marque*, both by Rudyard Kipling.

the railway station; by giving notice to the Hakim, food can be supplied. A car from Udaipur can be arranged

History—**Chitor** was taken (or founded) about 728 A.D by Bappu Rawal Bappu is supposed to have been reared by Bhils and, at the installation of the Ruler, a Bhil applies to his forehead blood from a cut finger. The history is written in the annals of Rajputana. Three times her defenders preferred death to surrender. The "crime of the sack of Chitor" is to this day an expression of recrimination among Rajputs

The first siege was in 1303 A D when Ala-ud-din Khilji, the Pathan King of Delhi, appeared to claim the beautiful Padmani, wife of the Rana's uncle, Bhim Singh By a ruse Bhim Singh, who had been taken prisoner, was released, and the attack defeated But Ala-ud-din returned; and when he was about to prove successful, in spite of the sacrifice of eleven princes, each made Rana for a day, all the Rajput women marched in procession to an underground cave, Padmani entering last, and were there immolated by fire The famous *jauhar* having been thus performed, Bhim Singh and his clansmen arrayed themselves in bridal robes of saffron and sallied forth Hamir recovered the Fort in 1313

The second siege, by Bahadur Shah, Sultan of Gujarat, came in 1535. The Rajputs put up a stout resistance, the Queen-Mother, Jawahir Bai, a Rathor princess, headed a sally, in which she was slain. At last nothing remained but to put the last hope of the Sesodias, the infant Udai Singh, in a place of safety, and to die fighting. As Chitor can only be defended by royalty, the crown of Mewar was placed on the head of Bagh Singh, the prince of Deolia.[1] The *jauhar* was again commanded, and thirteen thousand Rajput women gave themselves to the flames. The gates were then thrown open, and the Deolia chief, at the head of his saffron-clad warriors, rushed on his fate. Every clan lost its chief; and over 32,000 Rajputs were slain.

Chitor was for the third time sacked in 1567, but although Akbar triumphed, the honour rested with the Rajputs, and particularly with two vassals of Mewar, Jaimal, the Rathor Thakur of Bednor, and Patta (Fatha), the Sesodia Rawat of Kelwa[2] The Maharana Udai Singh (1541-72) had left when Akbar sat down before it, and when the Salumbar chief[3] fell at his post, the "Sun Gate," the command devolved upon his fellow-clansman Patta His mother bade him put on the saffron robe, and both she and his bride died fighting by his side Jaimal took the lead when the Sesodia fell, but was killed by a shot fired by Akbar himself. For the third time in the history of Chitor, the *jauhar* was performed, and few, if any, of the 8000 Rajputs who passed through the opened gates survived to "stain the yellow mantle" Again all the clans lost their chiefs nine Ranis and five princesses perished in the flames, and 1700

[1] The present Maharawat of Pertabgarh, a ruling chief, is descended from Bagh Singh

[2] The descendants of Jaimal and Patta are still among the nobles of Mewar, who form a numerous and powerful body The territories of the Mewar Omraos and Rawats comprise more than half the State, and they have the right to sit in darbar above the heir apparent For this reason the heir-apparent never appears at a public darbar

[3] The Salumbar Chief had the hereditary right to lead the van in the battle, and to command the Suraj Pol gate of the fortress when besieged On all old grants the sign of the Salumbar lance precedes the Udaipur monogram.

of the immediate kin of the Maharana sealed their duty to their country with their lives. The names of Jaimal and Patta are still household words in Mewar, and their deeds are the subject of many Rajput ballads Even Akbar erected their statues, possibly those mounted on elephants at the Delhi Gate of the Delhi Fort, where Bernier saw them in 1663.[1] Chitor was now lost to the Maharana, and he transferred his capital to Udaipur, but Chitor was restored in 1616

The Fort — The abrupt rocky hill, crowned by the magnificent Fort, rises 500 ft. above the surrounding country, though its great length of 3½ m makes it look lower than it really is The whole of the summit is covered with ruins and the slopes with thick jungle In the Fort itself there is a village, and a large palace was built by Maharana Sir Fateh Singh (d 1930)

The Fort was in existence when it was taken by Bappu Rawal from the Mori Rajputs, its previous owners. Up to the year 1568 A D the city was situated within the Fort The modern town of Chitor, known as Talaiti or Lower Town, lies at the foot of the hill, surrounded by a wall The principal entrance to the Fort is on the W

The Gambheri river below is crossed by an old bridge of grey limestone, with ten arches, of pointed shape, except the sixth from the W. bank, which is semicircular. The gateways and towers which existed at either end of the bridge have now disappeared.

An ascent 1 m long, with two zigzags, is defended at intervals on the W. by seven magnificent gateways, large enough to contain guard-rooms and even fine halls. They are the Pádal Pol, the rebuilt Bhairon or Tuta (Broken) Pol, the Hanuman Pol, the Ganesh Pol, the Jorla Pol, the Lakshman Pol, and the Main Gate, or Ram Pol The gate on the E is the Suraj Pol, or Sun Gate At the N extremity is another gate, the Lokhota Bari, and near the S extremity is a small aperture in the wall through which traitors and criminals were thrown out

Immediately outside the Pádal Pol, on the left, is a stone marking the spot where Bagh Singh, the chief of Deolia, was killed during the siege of Chitor by Bahadur Shah, of Gujarat, in 1535

Between the "Broken" and the Hanuman gates there are on the right two chhattris marking the spots where Jaimal of Bednor and his clansman, Kalla, were killed in Akbar's siege in 1568 Kalla carried his wounded chief down to have a last stroke at the enemy, and both died fighting Another chhattri indicates the place where Patta (or Fatha) of Kelwa fell at the same time

Facing the Ram Pol or main gate is a pillared hall, used as a guard-house, and apparently of ancient construction From the top of this hall, on which there are two four-pillared chhattris, a fine view of the plain is obtained

The Ram Pol is crowned by a Hindu horizontal arch, in which the upper courses of either side are corbelled out till they nearly meet, and are then connected by an overlying slab This is the construction of all the gateways on the ascent, except the Jorla In one, the Lakshman, the lower angles of the projecting courses are sloped off, giving the whole the outline of a regular pointed arch Inside the gate, on each side, is a hall, supported on square-shaped and slightly tapering antique pillars.

[1] They were afterwards removed and have been replaced by Lord Curzon (p 294)

The principal objects of interest in the old city are the Towers known as *the Kirti Stambh* or Tower of Fame, and the *Jaya Stambh*, or Tower of Victory The Tower of Fame, which is much the older, is near the E. rampart, and is reached by a broad road turning to the left inside the Ram Pol, and passing the Kukreswar Kund and Palace of Ratna Singh, or by a path proceeding directly to the E. Fergusson thus described it: "One of the most interesting Jaina monuments of the age (the first or great age of Jaina architecture, which extended down to about the year 1300, or perhaps a little after that) is the Tower formerly known as Sri Allata's (who ruled 953-972). It is a singularly elegant specimen of its class, about 75 ft in height, and adorned with sculptures and mouldings from the base to the summit. An inscription once existed lying near its base, which is said to have given its date as 895 A D, though the slab has now been lost This, however, is much too early a date for the style of the structure.

. The tower most probably belongs to the 12th century, and, it is said, was dedicated to Adinath, the first of the Jain Tirthankars, and nude figures of them are repeated some hundreds of times on the face of the tower, distinguishing it as a Digambara monument. The temple in the foreground, S. side, is of a more modern date, being put together, partly, of fragments of older buildings, which have disappeared"

The tower consists of seven storeys, with an internal narrow and cramped staircase, the roof of the open top storey, which rests on pillars, was much damaged by lightning, but has been well restored. Fragments of an inscribed stone are on the ground under a tree just N. of the tower.

S. of the Tower of Fame the very ancient temple of Nilkantha Mahadeo is passed on the right, and the **Suraj Pol**, or Sun Gate, and its tanks on the left. At the Suraj Pol is a chhattri which marks the spot where the Rawat of Salumbar fell when defending the gate during Akbar's siege A mile farther on is the Raj Tila or State hill, the loftiest point on the tableland; the broad road passes round this and returns N. by the Mori Tank, but walkers will probably cross from the E. gate (the Suraj Pol) across the Chaugan to the palace of Rana Bhim Singh and his **Rani Padmani**—a large building overlooking a tank In the tank itself, surrounded by water, is a building said to have been Padmani's island retreat, from which Akbar carried off the bronze gates now in the fort at Agra (p. 268)

A road leads past the palaces of Jaimal and Patta to the Jaya Stambh or **Tower of Victory** Fergusson wrote: "A revival of Jaina architecture took place in the 15th century, especially under the reign of Kumbha, one of the most powerful of the kings of the Mewar dynasty, whose private capital was Chitor His reign extended from 1428 to 1468, and it is to him that we owe the other of the two towers that still adorn the brow of Chitor

. . This one was erected to commemorate his victory over Mahmud Khilji, of Malwa, in the year 1440. It is therefore in Indian phraseology a *Kirtti* or *Jaya Stambha*, or Pillar of Victory, like that of Trajan at Rome, but in infinitely better taste as an architectural object than the Roman example, though in sculpture it may be inferior. . . . It stands on a basement 47 ft. square and 10 ft. high, being nine storeys in height, each of which is distinctly marked on the exterior. A stair in the interior communicates with each, and leads

to the two upper storeys, which are open, and more ornamental than those below. It is 30 ft. wide at the base, and 122 ft. in height, the whole being covered with architectural ornaments and sculptures of Hindu divinities to such an extent as to leave no plain parts, while at the same time this mass of decoration is kept so subdued that it in no way interferes either with the outline or the general effect of the pillar." The old dome was injured by lightning, and a new one was substituted by Maharana Sarup Singh (1842-61). The stair is much wider and easier than that in the Jain tower (the small Kirtham), and in the inside are carvings of Hindu deities with the names below. In the top storey are two of the original four slabs with long inscriptions The tower took ten years to build — from 1458 to 1468 On the road at the corner of the lower platform is a square pillar recording a *sati* in 1468 A D

S.W of the Tower of Fame is the **Mahasati**, a small wooded terrace, which was the place of cremation of the Ranas before the move to Udaipur Here there are many *Sati* stones, recording the self-immolation of the widows of the princes and nobles. Below, on a low terrace, are the Gaumukh springs and reservoir The springs issue from the cliff at places carved with a cow's mouth—hence the name Near by is the opening of a cave where Rani Padmani and the Rajput ladies are said to have performed the *jauhar* To the S.W. is an ancient temple, built by Rana Mukalji, beside which is a huge carved head of Vishnu

To the N. of the Tower of Victory rises the **Temple of Vrijl**, built by Rana Kumbha about 1450—a massive building with a *Sikhara* (or tower) of unusually large proportions (see Fergusson, *Indian Architecture*, 2, 151). Hard by is a similar temple, built by his wife, the famous Mira Bai, of which the chief peculiarity is that the procession path round the cell is an open colonnade with four small pavilions at the corners Between the Tower and the Ram Pol are the Nau Katha Magazine and Nau Lakha Bhandar, or Treasury, and on the wall connecting these is a small and very beautiful Jain temple Near this is the **Palace of Rana Kumbha**, in a ruinous condition The road now traverses the old Moti Bazar to the Western Gate, and completes the circuit

8 m. N of Chitorgarh is Nagari, the ruined temples at which are described by Prof. D. R Bhandarkar, in No 4 of *Memoirs, Arch Survey of India* (Calcutta, 1920)

A branch line, 69 m., runs from Chitorgarh to Udaipur At Mavli junction (45 m) there is a branch running down the Aravalli scarp to Marwar junction (94 m , p. 210). The Agency House at Dabok, where Colonel Tod, the first Resident (1818), and author of the *Annals of Rajasthan*, lived, lies in ruins a few miles S of Debari, 8 m. E of the Capital

About 2 m. before reaching Udaipur, the Arh river is crossed, with the town of that name on its banks (p 159) This stream collects the whole drainage of the Girwa An immense masonry embankment, made by Maharana Udai Singh, forms the Udai Sagar Lake (2½ m by 1½ m.), the surplus waters from which, escaping, form the Birach river, which flows past Chitorgarh The railway stops about 3 m. E of

UDAIPUR* (1893 ft above sea-level), "City of Sunrise," capital of the State of Mewar. The ruling family, which is Sesodia Rajput by caste, is descended from the Suryabansi, or Sun-stock,

royal dynasty of Kanauj, and is the premier house of India in point of blue blood. The Ruling Prince, H.H. Maharajadhiraja Maharana Sir Bhupal Singh Bahadur, G C S I. (born in 1884, succeeded his father in May 1930), is generally known as "The Sun of the Hindus," and the sun in splendour is emblazoned on his standard He is entitled to a permanent salute of 19 guns and a personal and local salute of two extra guns[1] The State covers an area of 12,691 sq m

The new capital of Udaipur was founded after 1568 by Maharana Udai Singh (who had been saved from being murdered as a baby by the devotion of his nurse, who substituted her own child), on the capture of Chitorgarh, or by his son, Pertab The States of Udaipur, Jodhpur (Rathor), Jaipur (Kachhwaha Chauhan), and Bundi (Hara Chauhan) are the four original great States of Rajputana.

There is a good road from the station to the Udaipur Hotel, which lies just outside the N.E corner of the city. Two full days, or more, can be well spent here.

The *City* is surrounded by a bastioned wall, which, towards the S, encloses large gardens The W side is bounded by the beautiful Pichola lake, and the N. and E sides by a moat supplied from the lake, while on the S the fortified hill of Ekhinggarh rises steep and wooded The principal gateways are the Hathi Pol or "Elephant Gate," to the N.; the Kishan Gate, to the S., the Suraj Pol, or "Gate of the Sun," on the E; the Delhi Gate, on the N.E., and not far from the Hotel; and the Chand Pol, or "Moon Gate," on the W., opening on to the bridge across the N end of the lake

N. of the Hotel is the Residency garden; the Victoria Hall and Museum (1887), with a statue of the Queen-Empress, are inside the city wall To the W. of the city is the Sajjangarh hill, 1100 ft. above the Fateh Sagar lake, with beautiful views of the lake from it. The Sajjangarh Palace is on the hill

The main street of the city leads from the Hathi Pol (Elephant Gate) to the Maharana's palace, passing a clock tower and the Lansdowne Hospital The Jagannath or Jagdish temple (built *c.* 1640) is approached by a flight of steps, with an elephant on each side at the top The temple is a good example of the Indo-Aryan style. The tower is ornamented by bold figured friezes and other architectural decoration. In front of the temple is a shrine with a brazen image of a Garuda. The Royal Palace (visible on application to the Private Secretary to the Maharana—without his permit only a few parts can be seen) is an "imposing pile of granite and marble, of quadrangular shape, rising at least 100 ft from the ground, and flanked with octagonal towers, crowned with cupolas. Although built at various periods, uniformity of design has been well preserved; nor is there in the E a more striking structure It stands upon the very crest of a ridge, running parallel to, but considerably elevated above, the margin of the lake The terrace, which is at the E and chief front of the palace, extends throughout its length, and is supported by a triple row of arches, from the declivity of the ridge. The height of this arcaded wall is full 50 ft., and although all is hollow beneath, yet

[1] Former Maharanas of Udaipur have been H H. Bhim Singh, who ruled for 50 years (1778-1828); H H Sarup Singh (1842-61); H H Sir Shambhu Singh, G C S I (1861-74); H H. Sir Sajjan Singh, G C S I (1874-84); H.H. Sir Fateh Singh, G C S I (1884-1930).

so admirably is it constructed that an entire range of stables is built on the extreme verge of the terrace. From this terrace the city and the valley lie before the spectator, whose vision is bounded only by the distant hills; while from the summit of the palace nothing obstructs the view over lake and mountain."[1]

The entrance to the palace is through the Bari Pol (1600 A.D.), or Great Gate, containing the Royal drums, and by the inner Tripolia (1725 A.D.); between the two gates are eight carved arches or torans, under which various Maharanas have been weighed in the past against gold and silver, afterwards distributed in largesse. Beyond the Tripolia the Ganesh Deori gate leads S. to the fine old court known as the Rai Angan or Royal courtyard (1571 A.D.), adjoined on the E. side by the Jewel Room, and from this the visitor will be conducted over a number of palace enclosures—all picturesque, and some beautifully decorated. Of these the Chhoti Chitra Shali has brilliant mosaics of peacocks, the Manak (Ruby) Mahal is filled with figures of glass and porcelain, the Moti (Pearl) Mahal is decorated with mirrors, and the Chini ki Chitra Mahal (1711-34) has beautiful ornamentation of inlaid mirror work and fine tiles of Dutch and Chinese make; the Bari Mahal, or Amar Vilas (1699-1711), has a charming garden in the centre of it. On the W. side of the Tripolia are the Karan Vilas (1620-28 A.D.) and Khush Mahal buildings, while southwards lies the Shambhu Niwas Palace, to which Maharana Fateh Singh added another residence, the Shiv Niwas.

The Pichola lake (2½ m. by 1½ m.) on the W. is reached through beautiful gardens S. of the palaces, and named the Sajjan Niwas, but commonly called the Gulab Bagh; and from these a road runs past the Dudh Talai down the E. side of the lake to the Khas Odi, built by Maharana Sir Sajjan Singh (1874-84) at its Southern end for use as a shooting-box. The feeding at this place of the wild pigs every evening affords a very curious sight. Beautiful as the lake is when seen from the palace and other points, the view on it near the S. end, with the marble-capped islands in the foreground and the lofty palace and city in the distance, is one of still greater loveliness.

The Southern island, named the Jagmandar, is chiefly notable for the Gul Mahal, a domed pavilion built by Karan Singh (1621-1628)—most of the other buildings date from the 18th century. On it Prince Khurram, later Shah Jahan, lived when in revolt against his father, the Emperor Jahangir, and the refugee ladies and children from Nimach (p. 154) were protected in 1857 by Maharana Sarup Singh.[1]

N. is the Jagniwas Palace island (1740 A.D.), with the older Dilaram and Bari Mahal palaces, in beautiful gardens, and also, unfortunately, with a modern palace and villa, and beyond this again to the W. are two small structures in the lake.

Visitors who wish to go on the lake should embark at the Sarup Sagar Ghat, near the mission house at the N. end of the chain of lakes (the Sarup Sagar, the Rang Sagar and the Pichola); a gratuity to the boatman at the end is customary. Visitors can land and be shown over the two islands, and can go to Odi Khas, and by previous arrangement can return by car. A view of the city from the bridge below the Gangour

[1] *Handbook of Mewar*, by Mehta Fateh Lal, son of a Prime Minister of the Mewar State.

[1] The Maharana swore that anyone who dared to violate the sanctity of their refuge should die by his hand. (Sir W. Lawrence, *The India We Served*, p. 74.)

Ghat is also specially effective This bridge is reached by diving into the slums to the W. of the main street; also by using a boat

On the bank of the Pichola lake, N of and adjoining the Shambhu Niwas, is the Minto Hall, of which the foundation-stone was laid during Lord Minto's Viceroyalty, to serve as a Darbar hall. N of the lake and connected with it by a canal is the Fateh Sagar constructed by Maharana Fateh Singh The foundation-stone of the embankment was laid by the Duke of Connaught in 1889 It can be reached by the road going W from the hotel, which winds among the hills and along two sides of the lake, and then crosses the dam Underneath the dam is the *Sakelion-ki-bari*, or Slave Girls' Garden, well laid out. On the way back from this, the *Residency* is passed A visit should be paid to the *Victoria Hall Museum*; also to the *Central Jail*, to see the carpet weaving The Sardars School is for sons of nobles

Two m. S of the hotel are remains of the ancient city called Arh, or Ahar The Chhattris or cenotaphs of the Maharanas, in the Jain style, on high plinths, stand in the Mahasati or royal place of cremation, which is enclosed by a wall and is adorned by many fine trees The most remarkable are those of *Sangram Singh II.* (1734), a large and beautiful structure, and of Amar Singh (1621), grandson of Udai Singh Near the village of Arh there are ruined temples of an older town

The *Great Lake at Kankroli*, or Rajnagar, called the Rajsamund, is 35 m. to the N of Udaipur. The Nauchoki Bund is of massive masonry, in many places 40 ft. high, and is 1115 ft long, with pavilions and torans, or ornamental arches, all of marble and exquisitely carved; behind is an earthen embankment 35 yds. wide. It was erected in 1660 by Rana Raj Singh, who defeated Aurangzeb on many occasions On the S E. side of the lake is the town of Kankroli, with a beautiful temple The lake is a landing-place for flying boats.

14 m N. of Udaipur in a ravine is the Eklinji lake with a white marble temple sacred to the family deity of the Maharana Near this, at Nagda, are two fine Jain temples, called the Sasbahu, or Mother and Daughter-in-law (p 183)

The Jaisamand lake, made by Rana Jai Singh at the end of the 17th century, is about 32 m. S E of Udaipur, it measures about 9 m by 5 m The dam is 1000 ft. in length and 98 ft in height

The Nathdwara State Temple (45 m N of Udaipur) contains an image which was at Muttra in 1495, and was brought here by Rana Raj Singh in 1691

379 m from Khandwa is **Nasirabad** station (D B, 1 m), the military Cantonment for Ajmer, from which it can be visited by frequent trains, or by a picturesque road (14 m.) The station was laid out in 1818 by Sir David Ochterlony

Deoli, on the Banas river, formerly a small Cantonment of the Mina Corps, is in Ajmere-Merwara, lying 57 m. S E of Nasirabad

Thirty m beyond Deoli is the city of **Bundi** (D B), founded 1342—introduction to Political Agent (Eastern Rajputana States, Bharatpur) necessary The area of the Bundi or Haravati State is 2220 sq. m The Chief, Maharao Raja Ishwari Singh, G C I E.,

M.C., A.D.C. to the King-Emperor, was born in 1893 and succeeded in 1927. His two immediate predecessors ruled from 1821 to 1927, Sir Ram Singh for 67 years, and Sir Raghubir Singh for 39 years. The family belongs to the Hara Chauhan clan of Rajputs, which is one of the four Agnikula created by Vishnu at the fire-pit at Gaumukh on Mount Abu (p 210) The title of Maharao was conferred by the Udaipur Ruler.

The palace, by a lake with islets on which are temples, was commenced *c.* 1600. Chattar Sal, governor of Delhi under Shah Jahan, led the escalade of Gulbarga under Aurangzeb, but was killed fighting for Dara at Dholpur (1658). Umad resisted Aurangzeb but was pardoned and made governor of Aurangabad (he died 1682) Bundi was freed from vassalage to Indore in 1818

393 m. from Khandwa is **Ajmer** junction station, whence the metre-gauge mail route to Delhi of the B.B C.I. Ry. proceeds *viâ* Jaipur and Rewari (Route 10, p 219).

ROUTE 9.

ITARSI JUNCTION to JHANSI by **Bhopal, Sanchi, and Bina** (line S E to Saugor), and from Jhansi to

(1) **Kalpi** and Cawnpore;

(2) **Orchha, Barwa-Sagar, Harpalpur** (for **Nowgong** and **Khajraha**), **Banda**, and **Manikpur**,

(3) **Datia**, GWALIOR, **Dholpur**, and Agra, **Muttra**, and **Delhi**.

Itarsi junction station, 464 m. from Bombay on the G.I P Railway (see p 43). The "Punjab Mail" train from Bombay branches off here and proceeds *viâ* Jhansi and Gwalior to Agra, 24 hrs, and to Delhi, Lahore, and Peshawar The railway (1884) as far as Bhopal is the property of the Bhopal State

12 m. **Hoshangabad** station (476 m from Bombay), D B K (1 mile), named after Hoshang Ghori of Mandu (p 148), built as a defence against the Gonds The railway crosses the Narbada (dividing Bhopal from British territory) on a bridge 2306 ft long (1884) About 4 m N. of the Narbada river the well-wooded, picturesque ascent of the Vindhya Hills commences, and at the top, Barkhera station (m 492), the line runs on the tableland of Malwa.

521 m. from Bombay **Bhopal** * junction (R.), D B., aerodrome. The town (alt 1622 ft) stands on the N bank of a lake, 4½ m long and 1½ m. broad, and is enclosed by a wall. It is the capital of the State of Bhopal. Visitors who can obtain an introduction to H.H. the Nawab can be entertained

at the State Guest House. Sanchi (28 m.) can be conveniently visited from Bhopal.

The dynasty was founded by Dost Muhammad, an Afghan chief in the service of Aurangzeb, who, appointed governor of Bhaursia (1690), took advantage of the troubles that followed the Emperor's death in 1707 to establish independence. He died 1723, leaving a Muslim island State in Malwa In 1778, when General Goddard made his famous march across India, Bhopal was the only Indian State which showed itself friendly. In 1809, when Colonel Close commanded another expedition in the neighbourhood, the Nawab of Bhopal applied to be received under British protection, but without success. The Nawab then obtained assistance from the Pindaris in the gallant struggle he maintained to defend himself against Scindia and Raghoji Bhonsla of Nagpur, in the course of which his capital underwent a severe siege for nine months

In 1817 the British Government intervened and formed an alliance with the Nawab, who was, in 1818, guaranteed his possessions, by treaty, furnishing a force, to maintain which districts in Malwa were assigned Islamnagar, 5 m. N., was then restored. The Nawab was soon afterwards killed by a pistol accidentally discharged by a child. His nephew, a boy, was declared his successor, and betrothed to his infant daughter, but the Nawab's widow, Kudsia Begam, refused consent (1837), and the declared heir resigned his claim to the throne and to the hand of the Nawab's daughter, Sikandar Begam, in favour of his brother Jahangir Muhammad. After long dissensions Jahangir Muhammad was installed as Nawab in 1837, through the mediation of the British. He died in 1844, when his infant daughter, Shah Jahan, was recognised as his successor, and Sikandar Begam, his widow, was made regent. After the Mutiny of 1857 Sikandar Begam was made the actual ruler, Shah Jahan becoming heir-apparent. Sikandar Begam died in 1868. Shah Jahan Begam ruled till 1901, and was succeeded by Nawab Sultan Jahan Begam, who abdicated in 1926 in favour of her surviving son, Nawab Haji Muhammad Hamidulla Khan, G.C.S.I., G.C.I.E., C.V.O. The State maintains an Imperial Force A Bhopal State Council was constituted in 1922

The name of Bhopal is said to be derived from that of its founder, Raja Bhoj, and the dam by which he formed the Lake, dam being in Hindi *pal* Thus Bhojpal has been corrupted into Bhopal.

The *Palace of the Nawab* is a large and imposing building, with sheer walls down to the lake The walls of Fatehgarh on the S. afford a view of the lake The *Jami Masjid* was built by Kudsia Begam, and the *Moti Masjid*, resembling the Mosque in the Delhi Palace, by Sikandar Begam The *Mint* and *Arsenal*, and the *Gardens* of the Kudsia and Sikander Begams also deserve a visit.

The *Taj-ul-masajid*, commenced by Shah Jahan Begam, will be the largest mosque in India; the armoury in Fatehgarh; the *Chauk* in the centre of the city; the Lady Lansdowne Hospital, and the club for *parda* ladies which was established by the Sultan Jahan Begam, the Alexandra High School for boys in the Be-nazir palace, the most picturesque building in Bhopal, the Sultania Girls' School in the Taj Mahal palace.

The roads and main buildings are lit by electric light. The town waterworks were built by Kudsia Begam. Excellent rowing-boats are kept on both lakes A drive to the Simla Kothi will well repay those who have time for it. The good shooting (big and small game) round Bhopal requires a permit.

A branch line (broad gauge), opened 1895, runs from Bhopal (114 m) to Ujjain (p 150). 24 m from Bhopal on this line is **Sehore** (alt 1818 ft), the former head-quarters (1820) of the British Resident, and once a cantonment.

The railway from Bhopal to Gwalior was opened in 1889

549 m. from Bombay is **Sanchi** [1] There is a Rest House near the station, and fast trains can be stopped here by the courtesy of the station-master at Bhopal. The bungalow is furnished, and a khansama is kept , but travellers intending to halt here should take food from Ry. refreshment room at Bhopal and bedding with them There is also a State R H , but a permit is required , consult the Superintendent of Archaeology

The monuments at Sanchi constitute the largest of several groups of Buddhist monuments situated near the ancient city of Vidisa, capital of the Sunga King Agnimitra, at the junction of the Besh and Betwa rivers (near the modern Bhilsa, which is the next station on the line), and often referred to as the " Bhilsa Topes " " Tope " is derived from *thupa*, the Prakrit form of *stupa*. In contrast with other famous centres of Buddhism, Sanchi had no connection with the life or acts of the Buddha ; nevertheless its buildings are perfect examples of Buddhist architecture. Perhaps it was the interest taken in the spot by the great Emperor Asoka, who was to Buddhism what Constantine the Great was to Christianity, that accounts for the splendour of these structures For one of the queens of Asoka, Devi by name, came from Vidisa ; and it was on the hill of Sanchi, then known as Chetiyagiri, that a monastery is said to have been built for his son (or brother) Mahendra, the apostle of Ceylon. The earliest buildings date from the time of Asoka, who is commemorated here more than anywhere else in India, and are contemporary with caves at Ajanta The site was found by a military officer in 1818 after the Pindari War in Malwa In 1822 a zealous district officer made an excavation in the Great Stupa and found relics which were lost. In 1851 General (Sir) Alexander Cunningham made a record, and in 1883 the Archæological Department filled the breach and did other work of restoration

The majority of the monuments were excavated (1912-19) by Sir John Marshall on behalf of the Bhopal Darbar, and much has been done to preserve their fabrics. The plateau on the hilltop, about 1100 A.D., was enclosed by a circuit wall of solid stone construction The buildings on this plateau divide themselves naturally into four classes ; firstly, the *stupas*, or *pagodas*, which were erected either to enshrine the relics of the Buddha or of one of his saints, or to commemorate some specially holy spot , secondly, the memorial pillars set up by the Emperor Asoka or by other devotees in later ages ; thirdly, the chapels or *chaitya* and shrines , and fourthly, monasteries or convents in which the monks and nuns lived. Small objects are in a Museum (1919)

[1] The best book is *Monuments of Sanchi* (3 vols , 1938), by Sir John Marshall

The description will follow an itinerary from the R.H. on the N.W. through the enclosure wall to the West gate of the Great Stupa, then to the South gate and some structures on the S., then to the East gate and buildings on the E., then to Stupa 3, the North gate, and back by Stupa 2 to the R.H. A guide is available

West Gateway.

The carved gateways or *toranas* at the cardinal points are of similar design—the work of carpenters rather than of stonemasons—and have survived in remarkable preservation for nearly 2000 years. The best-preserved is the Northern one. Each gateway was composed of two square pillars surmounted by capitals, which in their turn supported a superstructure of three architraves with spirals carved at the ends, one above the other. The capitals were adorned with standing dwarfs or with the forefronts of lions or elephants set back to back in the Persepolitan fashion; also, acting as supports to the projecting ends of the lowest architrave, Caryatid figures. Other images were disposed among the architraves, while crowning and dominating all was the sacred wheel (broken), flanked on either side by attendants and *triratna* emblems.

Pillars and superstructure were elaborately enriched with basreliefs illustrative of the *jataka* legends or scenes from the life of the Buddha and episodes in the life of Asoka. Inscriptions carved on the gateways on the balustrades record the names of pious individuals or of guilds who contributed to their erection. Interpretation of the scenes has been rendered difficult by the practice, until the Mahayana period, of never portraying the Buddha in bodily form, but of indicating his presence by his footprints, or a throne, or the sacred tree associated with his enlightenment.

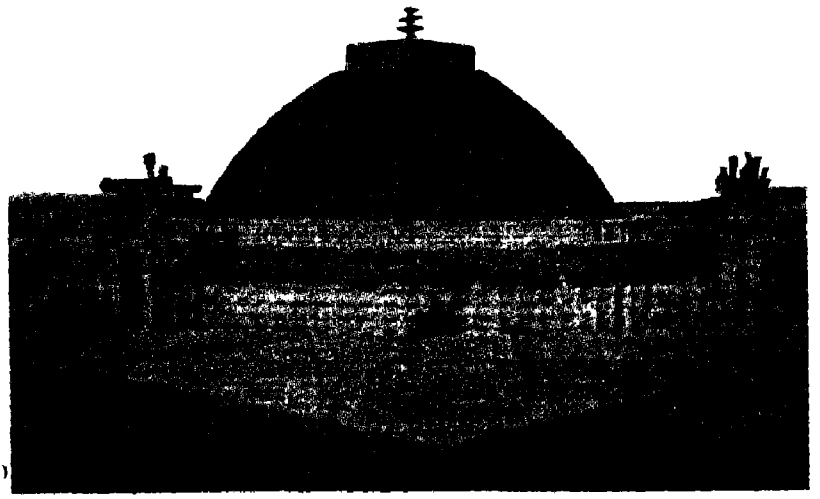
The West gateway (re-erected 1883) was the last to be put up On the top lintel (front) are seven Buddhas, on the middle the Sermon at Sarnath, on the lowest Chaddanta Jataka with elephants (better done on the back of the South gateway). At the outer side of the right pillar is a grapevine or Assyrian Tree of Life.

The **South Gateway** is the oldest (wrongly restored in 1883). The top lintel (front) shows the Birth of the Buddha, the middle a visit of Asoka to the Ramagriha Stupa, and, in the top panels of the inner face of the left pillar, Asoka is shown as Buddh-Gaya.

The *stupas* on the sandstone hilltop number many scores, ranging in date from the 3rd century B.C. to the 12th century A.D., and varying in size from the Great Stupa to miniature votive *stupas* no more than a foot in height set up by the pious Buddhists as a work of merit which would help the donor a step nearer to his goal.

The **Great Stupa** or Tope, anciently called Chaitya giri, the Chapel Hill, is situated on a level platform about 350 ft. above the plain. Originally built of brick in Asoka's time, about half the present size, it was enclosed in stone (*c.* 150-100 B.C.) to form a dome, 42 ft. high and 106 ft. in diameter A plinth 14 ft. high and 6 ft wide, added but not bonded in, carries a terraced path, reached by steps on the S. side, used clockwise for the perambulation of the Tope. The Tope was crowned by an altar or pedestal surrounded by a rail, and an

umbrella (*hti*). The berm was enclosed below at a distance of 9½ ft. from it by an outer railing slightly elliptical in shape, formed of pillars nearly 10 ft. high, carrying three bars of oval section, each 2 ft. 2 in. long, and separated by an interval of 3 in., a rounded coping stone surmounts the whole The gateways were erected *c.* 35 B.C. by the Andhras (see Chronology, p. lxxv Introd.) Facing each gateway, with its back to the wall of the plinth, is a large seated statue, probably representing the four last Buddhas These were in place before 450 A.D.

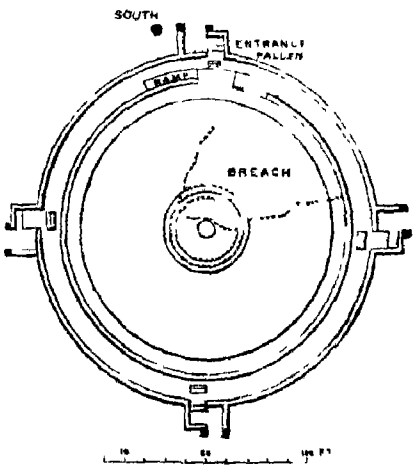


Great Stupa (restored)

The **Column** of Asoka (shattered) stood by the South gateway It was 42 ft. high, and weighed about 40 tons. It was brought from Chunar near Benares, probably by water, up the Ganges, Jumna, and Betwa rivers. On its broken stump is an edict written in the early Brahmi characters in which the Great Emperor exhorted the Buddhists to avoid schisms in their church. The three lions back to back on the capital (now in the Museum), with their swelling veins and tense muscular development, afford an example of what Græco-Persian art was achieving in India during the Maurya age

Of the shrines and monasteries the most noteworthy is the *chaitya* hall (Temple No 18), which stands directly opposite the South entrance of the Great Stupa, and is one of few structural edifices of this type The classic-looking columns of the nave resemble the pillared aisles of Paestum or of Athens, and the rounded apse those of early Christian churches. The pillars and walls of this chapel date back no farther than 650 A.D., and the sculptured jamb of the porch is more modern still by three or four centuries, but beneath the floor of the temple are the remains of three older chapels which, being constructed of wood, perished

Another structure which recalls the classic temples of Greece, is a little shrine (No. 17) just E. of the one just described. It consists of a simple flat-roofed chamber with a pillared porch in front, characteristic of the age of India's "Renaissance" (*c.* 425 A.D.) S of this shrine is a lofty plinth supporting the stumps of numerous octagonal columns (Temple No 40) Originally it was an apsidal *chaitya* hall, with a superstructure of wood, but the superstructure was burnt down about the beginning of the Christian era and the plinth was then enlarged and stone substituted for wood Many of the columns bear *ex-voto* inscriptions in the early Brahmi characters.



Great Stupa Plan (1851)

The reliefs on the **East Gateway** [1] are typical of the rest On the right pillar are represented, in six panels, the six stages to Nirvana of the Buddhist Paradise. On the left, starting from the base, is Bimbisara, issuing from the city of Rajagriha on a visit to the Buddha, symbolised by a throne. In the three panels above is depicted one of the miracles by which Buddha converted the Brahman ascetic Kasyapa and his disciples. The Nairanjana river is shown in flood with Kasyapa and two of his disciples hastening in a boat to the rescue of Buddha. In the lower part of the picture, Buddha, represented again by his throne, appears walking on the face of the waters, and in the foreground the figures of Kasyapa and his disciples are repeated, now on dry ground and doing homage to the Master The top two panels S of the left pillar portray the temple at Buddh-Gaya, built by Asoka, with the throne of Buddha within, and, spreading through its upper windows, the branches of the sacred tree It is the illumination of Buddha

On the inner gate (top) Indra and Brahma visit the Buddha (an umbrella) The next below shows victory over a serpent (Naga)

The scenes on the lintels are still more elaborate. On the lowest we see, in the centre, the temple and tree of Buddh-Gaya; to the right, a royal retinue and a king and queen descending from an elephant, and afterwards worshipping at the tree. This is the ceremonial visit which Asoka and his queen Tishyarakshita paid to the Bodhi tree, for the purpose of watering and restoring it after an evil spell which the queen had cast upon it. The middle lintel is occupied with the scene of Buddha's

[1] Casts are in the Indian Museum, South Kensington, London, and in the Edinburgh Museum, others were sent to European capitals at the request of Napoleon III, Emperor of the French.

departure from Kapilavastu (*Mahâbhinishkramana*). To the left is the city with wall and moat, and issuing from its gate the horse Kanthaka, led by Chandaka, his groom, who holds the umbrella symbolical of his Master's presence In order to indicate progress, this group is repeated four times in succession towards the right, and then we see Chandaka and the horse sent back and the further journey indicated by footprints surmounted by the umbrella. In the topmost lintel are the seven last Buddhas, the first and last symbolised by thrones beneath their appropriate Bodhi trees, the rest by *stupas*.

The inner sides of the pillars and the whole back of the gateway are carved At the top of the right pillar is Homage to Buddha, next, below, the Dream of Maya when conceiving him, and below again a miracle of levitation The middle lintel shows the Illumination, and the back of the left pillar the heavens

Of the fourth and last class of monuments on this site—namely the residence of monks and nuns—there are five examples, and they range in date from the 4th to the 11th century A.D The earlier ones, which once occupied the Eastern side of the plateau, were built of wood and have perished or been buried beneath the foundations of later structures. Those which have survived are all built more or less on the plan of the ordinary domestic house of ancient India, with a square open court in the centre and ranges of two-storeyed chambers on the four sides. The most interesting, as well as the most modern among them, is the one occupying the highest part of the plateau towards the E. Here are the remains of several courts, surrounded by monastic cells, and on the Eastern side of what was evidently the principal court is a lofty shrine, containing an image of the Buddha seated beneath the Bodhi tree, when touching the earth with his right hand he called on her to bear witness for him against Mara, the Evil One It might be thought that this shrine is not Buddhist at all but Hindu, for its style is precisely that of a Hindu temple of the late mediæval period, were it not for the statue of the Buddha in the sanctum and some of the images in the niches round its outer walls. The reason for this is that by the 11th century Buddhism had come deeply under the influence of Hinduism, and this influence made itself manifest in many new doctrines and ideas, which it absorbed from the parent religion

From the E. of the hill a view to the N. shows the surroundings of Bhilsa

No 3 Stupa (150-140 B C) stands about fifty yards to the N E of the Great Stupa and is of almost identically the same design but of smaller proportions, 50 ft in diameter, 27 ft high The dome and railings have been reconstructed. There is one gate (*post* 70 B.C) The surface was once coated with stucco; moulded in relief on this stucco were great garlands encircling the dome; gold and brilliant colours were used to pick out the decorations. In this stupa relics of two famous disciples of the Buddha—Sariputra and Mahamogalana—were discovered (1851) in a chamber set in the centre of the structure and on a level with the top of the

terrace. It contained two stone boxes, each bearing a short inscription: on one the word *Sariputasa* "of Sariputra," and on the other *Mahamogalanasa* "of Mahamogalana"; and inside each of the boxes was a casket of steatite containing fragments of human bone and a variety of beads of pearl, garnet, lapis-lazuli, crystal and amethyst

North Gateway In this there are shown many episodes in the life-story of the Buddha in his last or previous incarnations

Stupa No 2 (150-104 B C) stands on a ledge half-way down the Western side of the hill It was opened in 1822, and relics were found in 1851, when the dome was destroyed There is no gateway, but the railing round the base (*c.* 70 B C) is almost intact and exhibits a variety of most interesting reliefs of the primitive Indian school, showing an extraordinary crude treatment of living figures coupled with an extraordinary power of decorative design Notice that horsemen are shown with stirrups, 500 years before these are recorded in any literature

The country for some distance round is studied with Buddhist remains, examined in 1851, but only at Sanchi are the remains abundant and well preserved.

Besides the group at Sanchi, there is at *Sonari*, 6 m. S.W., a group of eight topes, of which two are important structures in square courtyards, and in one of these numerous relics were found At *Sadhara*, W. of Sanchi on the bank of the Bes river, is a tope 101 ft in diameter, which yielded no relics, and one 24 ft. in diameter, in which were found relics of Sariputra and others like those found at Sanchi.

At *Bhojpur* (Pipaliya) (7 m. S E) are thirty-seven topes, the largest 66 ft in diameter, and in the next to it important relics were found At *Andher*, 5 m S.E of Bhojpur, is a group of three small but very interesting topes, well preserved. None of these places are easily accessible

555 m **Bhilsa** station (alt 1407 ft), in Gwalior, on the Betwa river, 16 m N. of Sanchi An old gun in the fort, 19½ ft in length, with a bore of 10 in, is said to have been made by order of the Emperor Jahangir Bhilsa is a place of Hindu pilgrimage to the temples in the bed of the Betwa river The Bijamandal Mosque was built from old Hindu temple remains (Vijaya Mandir). Bhilsa (Bhailas Vasman) superseded Vidisa

At *Besnagar* (part of an ancient city, Vidisa, extending from the junction of the Betwa and Bes

rivers as far S.W. as Udayagiri Hill and S.E to the Lohanggi Rock, citadel of Bhilsa) is a monolithic pillar, locally known as Khamb Baba, of the date of 90 B.C. The inscription records that it was erected as an Eagle banner (Garuda - dhavaja) in honour of the god Vasudeva (Vishnu) by Heliodoros, a Greek ambassador of the Indo-Greek King Antialkidas of Taxila (p. 369) at the court of Bhaghadra, King of Vidisa. At the bottom of the pillar are *steel* wedges.

At Udayagiri (4 m W.) are caves in sandstone with sculptures and inscriptions of the Gupta period (A.D 320-606), with a colossal image of the Varaha Avatara (Boar incarnation). Two inscriptions refer to Chandragupta Vikramaditya (380-414), and a third to Kumaragupta (414-455)

At Gyaraspur (24 m N.E. on the Saugor road) there are remains of mediæval temples with carvings.

The Athakhamba are pillars of a temple (982 A D) At Bajramath are three adjoining shrines, the centre one of Surya the Sun, the southern of Vishnu, the northern of Siva The Maladevi Hindu temple has been converted to Jain use There are stupas also.

579 m. from Bombay, **Basoda** station. Road to Sironj (30 m. N.W. across the Betwa), stronghold of Amir Khan

585 m. from Bombay is **Bareth** station. 4 m. E. by metalled road in the village of Udaypur (in the Gwalior State) is a magnificent temple of Siva known as Udayeswar or Nilkhanteswar, built by Udayaditya a Paramara (1059 A.D.). The carving on every part of this Indo-Aryan temple is exceptionally fine. Sher Khan's mosque (1488) and the Shahi Masjid are Muslim

607 m from Bombay is **Bina** junction (R). 8 m. from Bina, at Eran, are some Jain and Buddhist ruins, including two monolithic pillars

From Bina a line runs N W to 74 m Goona, 147 m Baran, and 188 m Kotah, where it joins the shorter route between Bombay and Delhi, controlled by the B B C I Ry (Route 12)

47 m from Bina junction on a branch line (165 m) running S E. to Katni Jn (p 46) is **Saugor** (D B), ceded 1818, 1732 ft above sea-level, on the borders of a fine lake (*Sagar*), nearly 1 m broad, from which it derives its name The lake is said to be an ancient Banjara work, but the present city dates only from the end of the 17th century, and owes its rise to a Bundela Raja Udaussa, descendant of Nihal Singh of Jhalaun. He built a small fort on the site of the present structure in 1660, and founded a village called Parkota, now a quarter of the modern town

Saugor town is well built, with wide streets The large bathing-ghats on the banks of the lake, for the most part surrounded with Hindu temples, add much to its appearance.

The existing *Fort* at Saugor, completed by the Mahrattas about 1780, stands on a height N.W. of the lake, commanding the whole of the city and surrounding country, and consists of twenty round towers, varying from 20 ft. to 40 ft in height, connected by thick curtain walls It encloses a space of 6 acres, and was a prison for Thugs (1829).

The Central Provinces Police Training School in the Fort, at which sub-inspectors of police are trained, was opened in 1906

There is an Equitation School, originally started in 1910

24 m W of Saugor by road is **Rahatgarh Fort**, taken by Sir Hugh Rose in February 1858 from the Nawab of Garhi Amastani (now in Bhopal State) He marched 10 m on to Barodia Naunagar where he defeated the Raja of Banpur Having relieved Saugor he marched to Garakota and defeated the Raja of Shahgarh. Returning to Saugor he marched towards Jhansi

95 m. on this line is **Damoh** (D B K), hdqrs. of a district.

Proceeding N. by the main line from Bina Jn , 636 m from Bombay is **Jakhlaun** stn Unmetalled road, 12 m to **Deogarh**. On a bluff overlooking the Betwa are the remains of temples dating back to early Gupta times On one, panels show Vishnu reclining on Ananda (Plate 2)

646 m from Bombay is **Lalitpur** station (D.B.), in the Jhansi District.

21 m. W. of Lalitpur is **Chanderi** in the Gwalior State, which was a place of considerable importance under the Sultans of Mandu. The road for the first 13 m., as far as Rajghat (Causeway) on the Betwa river, is in British territory and motorable from November to June (R.H. on left bank of river). Between Rajghat and Chanderi the road, which is in the Gwalior State, is metalled , there is rather a steep ascent for about 1½ m. near Chanderi. The road continues S. (24 m.) to Mungaoli station, 20 m from Bina junction, on the Bina-Kotah branch line Chanderi is connected also with the Agra-Bombay road *viâ* Esagarh (D.B.), which is 14 m. S.E of Shivpuri State D.Bs. at Chanderi and Mungaoli (travellers must make their own arrangements about food)

Chanderi is situated on a bay of hills, overlooking the valley of the Betwa. The old Hindu town, 8 m. N. of the modern town, is hidden in thick jungle, an excellent hunting-ground. The ruins of a few Jain temples of about the 10th century A D. contain some fine sculpture. The modern town is widely known for its muslins and gold brocades

At the height of its prosperity, it seems to have covered an extensive area . for there are numerous remains of palaces, sarais, wells, mosques and tombs, in the Mandu variety of the Pathan style of architecture The hill fort, overlooks the town. The Koshak Mahal at Fatehabad, a Muslim palace, is a ruin, but is maintained as an archæological monument There are some rock-cut Jain statues in the Khandar hill. Three palaces on the outskirts, built by the Bundela Rajas, have been repaired and are used as shooting-boxes. (A guide to Chanderi is published by the Archæological Dept. of the Gwalior State and can be obtained at the D B.)

671 m. **Talbahat** station. There is an Inspection House A pic-

turesque town with a fine old fort overlooking a large piece of artificial water covering more than 1 sq. m. The water is retained by damming the streams that flow through a rocky barrier about 800 ft. high

At 676 m. the Betwa river is crossed by a bridge 1446 ft. long (1889)

702 m from Bombay is **Jhansi*** junction (R., D.B.), a centre of the G.I.P. Railway system. The main line runs N. to Gwalior, 61 m., Agra, 133 m., and Delhi, 255 m., one branch N.E. to Cawnpore, 137 m., and Lucknow, 181 m., and another E. through Banda, 119 m., to Manikpur junction (p. 46), 181 m., where it connects with the Bombay-Calcutta mail route, *vid* Jubbulpore

By road Jhansi to Saugor (D.B.) is 122 m., a good motoring road. The Betwa river is crossed at 24 m. from Jhansi on a causeway in the hot weather, at other times by a ferry. Jhansi to Banda is 122 m., *vid* Nowgong 65 m. (ferry over the Betwa, 8 m. from Jhansi). Jhansi to Shivpuri or Sipri (W.) is 61 m. by a metalled road. Shivpuri (p. 185) is the summer hdqrs. of the Gwalior State administration. 12 m. short of Shivpuri is **Surivaya**, a ruined fortress enclosing a Hindu monastery. Three Hindu temples with fine carvings and a *baoli* or well are to be seen here; all are of the 10th century A.D. Jhansi to Gwalior is 61 m., to Dholpur 103 m., to Agra 138 m.

Jhansi (alt. 848 ft., pop. 1941, 103,254) is notable for its fort, which the British Government ceded in 1858 to and obtained in 1886 from Maharaj Scindia in exchange for Gwalior, and places of interest—Datia (p. 176), Orchha and Barwa-Sagar (p. 173)—can be reached from it.

The Province of **Bundelkhand**, in which Jhansi is situated, was for ages turbulent and difficult to manage. In early days the Orchha State extended from the Jumna to the Narbada and from the Chambal on the W. to the Tons (p. 53) on the E. Bir Singh Deo of Orchha (1605-27) built the fort of Jhansi, 8 m. to the N. of his capital, which is situated on an island in the Betwa river. He incurred the heavy displeasure of Akbar by the murder of Abul Fazl, the Emperor's favourite Minister and historian, at the instigation of Prince Salim, afterwards the Emperor Jahangir. A force was sent in 1602; the country was ravaged and devastated, but Bir Singh himself contrived to escape. On the accession of his patron, Salim, in 1605, he rose into great favour, but when, in 1627, Shah Jahan mounted the throne, Bir Singh revolted unsuccessfully, being defeated by Aurangzeb (then only 13 years of age) and a good General. He never regained his former power and independence. During the troubled times which succeeded Orchha was sometimes in the hands of the Muslims and sometimes under Bundela Chieftains.

In 1732 Chatar Sal called in the Mahrattas, who were then invading the Central Provinces under their Peshwa Baji Rao I. They were rewarded on the Chief's death, in 1734, by a bequest of one-third of his dominions. In 1742, however, the Mahrattas found a pretext for attacking the Orchha State and annexing it amongst other territories. Their General founded the city of Jhansi, and peopled it with the inhabitants of Orchha.

The district remained under the rule of the Peshwas until 1805, when certain rights passed to the E.I. Company. Under British protection, successive Rajas ruled

until their incompetence ruined the country, and, when the dynasty died out on the death of Gangadhar Rao, in 1853, their territories lapsed to the British Government. A pension of £6000 a year was granted to the young Rani, or widow, of the late Raja Rao, Lakshmi Rai, who, however, considered herself aggrieved, both because she was not allowed to adopt an heir, and also because the slaughter of cattle was permitted in the Jhansi territory

The events of 1857, accordingly, found Jhansi ripe for rebellion On the 5th of June a few men of the 12th Bengal Infantry seized the fort, containing the treasure and magazine Many European officers were shot and the remainder capitulated a few days after, but were massacred with their families, in spite of a promise of protection sworn on the Koran and Ganges water

The Rani tried to seize the supreme authority, but the usual quarrels arose between the rebels, during which the Orchha leaders laid siege to Jhansi and plundered the country mercilessly. On the 4th of April 1858 the fort and town were captured by Sir Hugh Rose, who marched on to Kalpi without being able to leave a garrison The rebellion broke out afresh, only the Gursarai Chieftain in the N. remaining faithful to the British cause On the 11th August a flying column under Colonel Liddell cleared out the rebels from Mau (40 m from Jhansi), and, after a series of sharp contests, reorganisation was fairly set on foot in November The Rani herself fell in a battle at Gwalior

The capture of Jhansi by Sir Hugh Rose's force in 1858 was a memorable feat of arms. The siege lasted from 21st March to 4th April 1858, and cost 343 in killed and wounded, of whom 36 were officers. In the hottest season of the year, the British force, which consisted of one incomplete division, fought without shelter from the sun The General had no plan, or even correct description, of the fort and city, and several days were spent in long reconnaissances

The fort was built (wrote Sir Hugh) on a huge granite rock . the walls were of solid masonry, 16 to 20 ft thick, the outworks were extensive and elaborate and of the same construction, with front and flanking embrasures for artillery fire, and loopholes, of which in some places there were five tiers, for musketry. Guns placed on the high towers commanded the surrounding country Except on the W. and part of the S, the fort abutted on the city, which was about 4½ m. in circumference and was encircled by a massive fortified wall, from 6 to 12 ft. thick, and varying in height from 18 to 30 ft., with numerous floating bastions armed as batteries with ordnance and loopholes, and with a banquette for infantry The steepness of the rock afforded protection from the W, and three flanking bastions defended the E. face of the fort. The most important of these was a high mound or mamelon, fortified by a strong circular bastion for five guns, round part of which was drawn a ditch, 12 ft. deep and 15 ft broad, of solid masonry. The garrison consisted of 11,000 rebel sepoys and local levies.

In the quarters of the Rani's bodyguard there was found a silken Union Jack which Lord William Bentinck had given to the grandfather of the Rani's husband, as a reward for his

loyalty. It was hoisted on the palace after the assault.

In the palace a large table was taken by the 3rd Bombay Europeans, afterwards the Leinster Regiment, disbanded 1922. The table is used by the Army Council

The fort has been modernised The views from the top and from the road round the ramparts are very extensive. A crag to the N.E. of the railway station, still called "Retribution Hill," marks the last stand made by the mutineers, in 1858

The old civil station (**Jhansi Nauabad**) attached to Jhansi before 1861 remains the headquarters of the district

(1) *Jhansi* to *Cawnpore* (138 m) and *Lucknow* (183 m) direct by G.I.P Ry. (broad-gauge branch, opened 1886)

Between Jhansi and Cawnpore the country abounds in black buck Numerous old fortified villages are seen from the railway train. Jhansi to Cawnpore *viâ* Hamirpur is 197 m. by road.

14 m. from Jhansi is **Paricha** station, on the Cawnpore road: the head works of the Betwa Canal 71 m long (1885) irrigating to Hamirpur and Jalaun A masonry dam (1885) holds up the water of the Betwa river A second dam was constructed in 1908 at Dhukwan, 20 m farther up the river. There is a metalled road to Dhukwan from Jhansi (22 m). At both places there are bungalows Permission may be obtained from the Executive Engineer (Irrigation), Jhansi.

56 m. Ait junction for Kunch (9 m.)

69 m. is **Orai** station (R., D.B.K., food available). The headquarters of the Jalaun district

92 m. from Jhansi is **Kalpi** station (R.H. 1 m. distant. Permission to occupy must be obtained from the Exec. Engineer, P.W.D., Orai). The town is situated amongst deep ravines on the right bank of the Jumna, which is here crossed by a girder bridge of ten spans of 263 ft. (1888), with a roadway (1934) The piers are about 60 ft. in height, built on wells sunk 100 ft below low water level

Tradition says that the town was founded by Basdeo or Vasudeva, who ruled at Kanauj from 330 to 400 A.D. During the Mughal period Kalpi played a large part in the annals of this part of India. It was the birthplace of Mahesh Das, afterwards famous as Raja Birbal, the minister of Akbar. After the Mahrattas came to Bundelkhand (1732), the headquarters of their Government were at Kalpi. At the time of the British occupation of Bundelkhand, in 1803, Nana Gobind Rao, Subahdar of Jalaun, seized the town. The British besieged it in December of that year, and, after a few hours' resistance, it surrendered Kalpi was then included in the territory granted to Raja Himmat Bahadur, on whose death, in 1804, it once more lapsed to Government It was next handed over to Gobind Rao, who exchanged it two years later for villages farther to the W. After the capture of Jhansi and the rout of the mutineers at Kunch (60 m from Jhansi), they fell back on Kalpi, their principal arsenal Here, on 22nd May 1858, Sir Hugh Rose (Lord Strathnairn) again defeated a force of about 12,000 under the Rani of Jhansi, the Rao Sahib, nephew of the Nana Sahib, and Tantia Topi, all of whom fled to Gwalior.

Kalpi manufactures a hand-made paper used by Indian Rulers for correspondence. The Western

outskirts of the town contain a large number of ruins, notably a tomb of the Lodi period called the 84 *Domes*, and twelve other handsome mausolea The old commercial agency on high ground near the river-bank is now deserted. A ruined fort on the steep bank of the Jumna above the town overhangs the bathing embankment, which has a picturesque temple, and is reached by a long flight of steps In the heart of the town is a curious monument, a big cylindrical tower on which is sculptured a huge figure of Ravana. It was erected in 1895 by a lawyer of Kalpi, who imagined himself to be an incarnation of this mythological personage.

138 m from Jhansi is **Cawnpore** junction (p 431). 45 m. farther on, by E.I. Ry. *viâ* Unao, is **Lucknow** junction (Route 22)

(2) *Jhansi* to *Manikpur*, 181 m., by G.I.P Rly. broad-gauge branch (opened 1889)

7 m S. from Jhansi is **Orchha** station, at the old capital of the Orchha State, now only a village, taking its name traditionally from the scoffing remark of a Rajput Chief, on viewing the site of the capital, "Orda chee" (it is low enough) It is built on both banks of the Betwa. There is an imposing fortress, connected by a masonry bridge with the rest of the town, containing in the S W. corner of the city, within the walls, the magnificent 17th-century palace of Bir Singh Deo (p. 170), and a palace built for the Emperor Jahangir but never used. The Chhattri of Bir Singh Deo is also fine The area of the State is 2079 sq. m. Rudra Pratap is said to have founded it in 1501. The Maharaja H H Sawai Mandra Bir Singh Deo II, Bahadur, was born in 1899 and succeeded his grandfather in March 1930. The Bundela clan is derived from Vindhyela, and the Orchha Chief, a Kshatriya of the Surya Vansh, is the recognised head.

Tikamgarh, the capital since 1783, founded by Maharaja Vikramajit, in the S.W. corner of the State, is about 60 m. S. from Orchha, with which it is connected by road; also with Lalitpur Railway station on the W. and Mau-Ranipur Railway Station on N.E. by metalled roads, 36 m. and 42 m. respectively. The earlier name was Tehri, the present name is derived from an appellation of Krishna, Ranchor Tikam.

14 m. from Jhansi is **Barwa-Sagar** station (D B) The town is picturesquely situated at the foot of a rocky ridge on the shore of the Barwa-Sagar lake, an artificial sheet of water formed by a masonry embankment ¾ m. in length, constructed by Udot Singh, Raja of Orchha, between 1705-37, and containing two craggy, wooded islets. Below, a tract of land, extending over 4 m., is thickly planted with mango and other trees, many of great age and enormous size. N.W. of the town rises a fine old castle, also built by Udot Singh, but now uninhabited. 3 m. W stand the remains of an old Chandel temple, built of solid blocks of stone, carved with the figures of Hindu gods, much defaced

40 m. **Mau Ranipur** station (D B ½ m., and Inspection House), next to Jhansi the principal commercial town of Jhansi district Its buildings are in the style peculiar to Bundelkhand, with deep eaves between the first and second storeys and hanging balconies. Trees and temples ornament the town, the principal being that of the Jains, with two solid spires and several cupolas An old brick-

built fort with bastions adjoins the bazar, and contains the public offices.

53 m. from Jhansi is **Harpalpur** station (R.), for **Nowgong** Cantonment, 19 m distant. D.B. and an Inspection Bungalow for military officers (not available), both in the Cantonment, also a Circuit House in the Civil Lines Nowgong was at one time a large military station. The Kitchener College (1930) has a statue of the Field Marshal In 1857 the troops in it mutinied on the 10th June Motor bus service, Harpalpur—Nowgong—Chhatarpur Harpalpur is the nearest station for Khajraho (p 175).

67 m **Belatal** station for **Jaitpur**, formerly the capital of a State, which was resumed by Lord Dalhousie in 1849 on the death of the last Raja without issue It is situated on the W. of a large tank, called Belatal, said to have been built by Bala Varma, a Chandel ruler (514-563 A.D); it has a circumference of nearly 9 m Two irrigation canals are run from it. A tank of about the same size, called the Majhgawan Tank, was excavated in 1914 some 6 m S of Belatal, and serves to irrigate the S.W. part of Kulpahar pargana On the W edge of Belatal runs a chain of several low hills, a fort is built on the top and along the slopes. The town of Jaitpur, originally founded by Jait Reshi (525 A.D.), and fort are ascribed to Jagatraj, second son of Chatarsal, a Bundela Chief who died in 1734. There is a temple called the Dhamsa. The canal bungalow at Jaitpur is not available, but another can be occupied by permission from the Collector of Hamirpur.

86 m. from Jhansi is **Mahoba**. (District Board and Survey Bungalows can be used with permission of the Collector of Hamirpur.)

Mahoba is believed to have existed under different names in all the successive cycles through which the world has passed Its name in the present evil age, Kala-Yug, Mahoba, is said to be derived from a great sacrifice (Mahot-Sava) performed by its reputed founder, Chandra Varma, a Chandel Raja, about 800 A D The town stands on the edge of Madan Sagar lake, named after the great Chief Madana Brahma (1015-1070 A.D). There are three distinct portions of the town: the old fort, N. of a low hill, the inner fort, on the top of the hill; and the Dariba, or "pan" bazar, on the S

Architectural antiquities of the Chandel period abound throughout the neighbourhood The Ram Kund marks the place where Chandra Varma, founder of the dynasty, died; a reservoir into which the waters of all holy streams unite. The fort, in ruins, commands a view over the hills and lakes. The temple of Mania Deva, partially renovated, has in front of its entrance a stone pillar, inscribed to Madana Brahma, the "Dewal dip," and another, "Alha ki Gilli," the staff of Alha, is near Madan Sagar Alha was a hero in songs of Rajput bards Farther along the *dargah* of Pir Mubarak Shah is built entirely of Hindu materials Of the lakes, confined by magnificent masonry dams, two have greatly silted up, but the Kirat Sagar, built by Kirat Brahma (1070-1115 A.D.), and Madan Sagar (1030 A.D.) still remain deep and clear sheets of water The shores of the lakes and the islands in their midst are thickly covered with ruined temples, monstrous figures carved out of the solid rock, pillars, broken sculpture and other early remains, while on the hills above

stand the summer-houses of the early Rajas, and shrines overhang the edge. Relics of Jain temples and Buddhist inscriptions also occur. Muslim monuments include the tomb of Jalhan Khan, constructed from the fragments of a Saivite temple, and a mosque, also built of Chandel materials There are broken Jain statues, and Buddhist statues are found. On a hill adjoining the S E bank of Madan Sagar there are twenty-four rock-hewn images of the "Tirthankaras," dated Sambat 1206 (1149 A D). (See *Six Sculptures from Mahoba*, No 8, Memoirs, Arch Surv of India 1921, by K N Dikshit)

The motor road from Jhansi through Nowgong (65 m) skirts Mahoba (102 m.), and reaches Banda at 132 m

Khajraho (Chhatarpur State, Central India) is about 60. m S E from Harpalpur (G.I.P. Railway) *viâ* Nowgong (D B) and Chhatarpur (D.B.K.) and about 36 m. from Mahoba There is a good metalled road from Harpalpur up to Khajraho, but the road from Mahoba is partly unmetalled Motors and buses available from Harpalpur The stn.-master at Harpalpur can arrange for a car Access also from Satna (p 46), on the G.I.P. Ry main line

Khajraho was formerly the capital of the old kingdom of Jujhoti which practically corresponds with the modern Bundelkhand. Hiuen Tsang mentions it in the 7th century, and General Cunningham ascribed the graceful pillared porch of the Ghantai Temple to the same period. A high mound probably covers the ruins of a Buddhist monastery Close by is a colossal statue of the Buddha. There are thirty temples, with three exceptions built between 950 and 1050 A D. by Chandel rulers. Several have been repaired (1906-10 and 1920-1923) at the joint cost of the State and the Government of India. A Jardine Museum has been added (1919).

In the *Kandarya Mahadeo*, a Saivite shrine, Cunningham counted over 800 statues, and eight elephants in horizontal panels on the buttresses round the Vimana and Mandapam The Sikhara is crowned by a lotus The *Temple of Ramachandra*, Vaishnavite, bears an inscription dating from 954 A.D. The third great monument at Khajraho is the *Jinanatha*, a Jain temple distinguished by its graceful pillars and profusion of sculpture Another Jain temple, the *Chaonsat Jogini*, or temple of the sixty-four female demons, each in a cell, is believed to be the oldest yet discovered

At 88 m from Jhansi the Betwa river is crossed by a bridge (1889) 2166 ft long

113 m **Khairada** junction (road from Jhansi), branch line (79 m.) through Hamirpur Road to Cawnpore (p 431) At 46 m. the Ken river is crossed: bridge 1558 ft. long (1889).

119 m from Jhansi is **Banda** station (R., D.B.) (alt. 419 ft). It stands on an undulating plain, 1 m E of the right bank of the Ken river "There is a pontoon bridge here in the dry season and a ferry in the rains, when special arrangements must be made for crossing, as the ordinary ferry-boat has insufficient accommodation for motors. In the dry season the

approaches on both sides and the roadway over the pontoon bridge required careful driving" (*Motor Guide*, U P.).

The modern town derived its importance from the residence of the Nawab of Banda, descended from Shamsher Bahadur, a Mahratta General at Panipat in 1761 The removal of the Nawab in *1858 followed on his disloyalty.* His mosque is E. of the town There are five Jain temples, and an old temple of Shri Shankar (approach motorable). The two characteristics of Banda Dt are its liability to agricultural calamity and its trade in the cutting and polishing of precious stones.

35 m. S. of Banda is the famous hill fort of **Kalinjar**, besieged by Mahmud of Ghazni (1021), and at which King Sher Shah is said to have met his death (1545), but taken by Martindell (1812) It contains many temples and antiquities, some dating back to the 12th century It is accessible *viâ* Naraini (22 m. from Banda) by a fair-weather unmetalled road Ajaigarh fort (taken 1809 by Martindell) s connected to Naraini by metalled road (8 m) There are rest-houses at both places and at Naraini (13 m from Kalinjar) Raja Ajai was a descendant of *Chhatar Sal.*

157 m. from Jhansi is **Chitrakot** stn., a celebrated place of pilgrimage where Sita, Rama and Lakshman are said to have lived after their exile from Ajudhia Special facilities for Hindus

162 m. from Jhansi is **Karwi Tarahwan**, in 1805 a Cantonment, and in 1829 residence of the ex-Peshwa's relative, Amrit Rao, who lived in state, and built several beautiful temples and wells Numerous traders from the Deccan were thus attracted to Karwi. During the Mutiny Narayan Rao, adopted son of Vinayak Rao, son of Amrit Rao, assumed the government for eight months. There is a fine temple and tank known as the Ganesh Bagh, built by Vinayak Rao in 1837.

181 m from Jhansi and 883 m. from Bombay is **Manikpur** junction *(p 46), on the G.I.P. Ry. Mail* route from Bombay to Calcutta, *viâ* Jubbulpore (Route 2).

(3) *Jhansi* to *Agra*, 133 m., and *Delhi*, 255 m , viâ *Datia*, *Gwalior*, and *Dholpur*, by G.I.P. Ry. main line.

718 m from Bombay on the G I P Ry main line to Delhi in **Datia** station, residence of the Ruler of the Datia State, H H Maharaja Lokendra Sir Govind Singh Bahadur, G C.I.E , K.C S I (born in 1886 and succeeded in 1907). The State covers an area of 912 sq. m Datia stands on a rocky height surrounded by a stone wall. The Maharaja's residence stands within the town. To the W of the town, on a hill within the walls, is the Govind Palace of Bir Singh Deo, of great architectural beauty, now untenanted.

725 m **Sonagir** station 2 m. off and visible from the railway are eighty Jain temples of modern date, forming an extremely picturesque group, well worth a visit

763m.fromBombayis**GWALIOR*** junction, 194 m. from Delhi (R., D B.), the capital of Maharaja Scindia. The area of the State, in direct relation with the Government of India through a Resident, is 26,397 sq. m This progressive State expended between 1898 and 1922 over Rs.25 millions on irrigation works. Thereis a Legislative Council. The present Chief, named after King George V , H.H. Maha-

raja Colonel Sir George Jayaji Rao Scindia Alijah (high in dignity) Bahadur, G.C.S.I., was born in 1916 and succeeded his father in 1925, and was placed in the *Gadi* in 1936 by the Viceroy (Lord Linlithgow). He is entitled to a salute of 21 guns

Of the Scindia family the most remarkable have been Ranoji, the founder (d. 1750), Mahdaji (d 1794), his grand-nephew Daulat Rao (d 1827), Jayaji Rao (1843-1886), and the late Maharaja Madhava Rao (1886-1925)

Gwalior is famous for its fort,[1] an ancient and renowned stronghold At *Morar*, a few m E of the fort, a garrison of British troops was stationed from 1858 to 1886, when the fort, with Morar, was made over to the Maharaja in exchange for Jhansi

The ry stn is about 1½ m. from Lashkar, the new town. The Grand Hotel (opp the rly. stn.) was built by Maharaja Madhava Rao and contains 100 rooms

History.

An inscription in Gwalior Fort records that a temple of the Sun was erected on the hill in the reign of Mihirakula (p. lxxxvi), son of the Huna adventurer Toramana. Two other inscriptions show that Gwalior was included in the kingdom of Kanauj under the Gurjara Pratihara, King Mihira Bhoja, who ruled over a great part of N. India about A.D. 900 After A.D 950, Vajradaman of the Kachhapagata or Kachhawaha dynasty, captured Gwalior from the Pratiharas of Kanauj. The Kachhawahas ruled over Gwalior for nearly 200 years. They are the Pal Kings of the bards Gwalior, according to bardic chronicles, not strictly historical, was founded by Suraj Sen, a Kachhwaha Chief, who was a leper, and coming when hunting to the Gopagiri Hill, on which the fort stands, received a drink of water from the hermit Gwalipa, which cured him He received a new name, Suhan Pal, from the hermit, with a promise that his descendants should reign as long as they were called Pal Eighty-three reigned accordingly; but Tej Karan, having discarded the name of Pal, lost his kingdom To this dynasty seven Parihara Princes succeeded, who ruled, with a short break, for 103 years—till Gwalior was taken by Altamsh in the 21st year of the reign of Sarang Deo.

The capture of Gwalior by Altamsh was commemorated in an inscription placed over the gate of the Arwahi, and the Emperor Babar states that he saw it, and the date was 630 A.H. = 1232 A D In A D 1398, after the invasion of Timur, the Tomar Chief, Bir Singh Deo, declared himself independent, and founded the Tomar dynasty.

Early in the 15th century the Gwalior Chiefs paid tribute to Khizr Khan of Delhi, and in 1424 Gwalior, being besieged by Hoshang Shah of Malwa, was delivered by Mubarak Shah of Delhi. In 1425 Dongar Singh commenced the great rock sculptures at Gwalior, and his son Kirti Singh, 1454, completed them. In 1465 Husain Shah, the Sharqi king of Jaunpur, besieged Gwalior, and obliged it to pay tribute. Man Singh (1486-1516) acknowledged the supremacy of Bahlol Lodi and of Sikandar Lodi of Delhi, the latter in 1505 marched against Gwalior, but fell

[1] Plan faces p 184

into an ambuscade, and was repelled In 1516 he made great preparations at Agra for the conquest of Gwalior, but died. Ibrahim Lodi sent an army of 30,000 horse, 300 elephants, and other troops, against Gwalior, and a few days after they reached that place Man Singh died.

He was the greatest Tomar of Gwalior, and constructed many useful works, amongst others the great tank to the N.W. of Gwalior, called the *Moti Jhil*, now silted up. His palace in the fort is the noblest specimen of Hindu domestic architecture in N India After Man Singh's death his son Vikramaditya sustained the siege for a year, but at last surrendered, and was sent to Agra, where he became the friend of Ibrahim, and died fighting at his side against Babar at Panipat in A D 1526

Babar sent Rahimdad with an army to Gwalior, which he took by a stratagem, suggested by the Saint Muhammad Ghaus In 1542 Abul-Kasim, Governor of Gwalior, surrendered his fortress to Sher Shah In 1545 Salim, son of Sher, brought his treasure from Chunar, and in 1553 died Ram Sah, grandson of Man Singh, tried to seize Gwalior, but, in a great battle for three days with Akbar's troops, was defeated, and the fortress remained in the hands of the Mughals until the Mahrattas took it in 1754

In 1761, after the battle of Panipat, Gwalior was taken by Bhim Singh, the Jat Rana of Gohad [1] (25 m N E), and in 1780 captured by Capt Popham from the Mahrattas, and restored to the Rana. Madho Rao Scindia [1] recaptured it in 1784. Colonel White took the fortress in 1803, but it was conceded to Scindia in 1805 by the Treaty of Multra. In 1843 there was a mutiny, and after the battles of Maharajpur and Panniar, it was virtually resumed until restored to Jayaji Rao Four ladies were given medals

During the 1857 Mutiny Maharaja Jayaji Rao Scindia had, besides 10,000 troops of his own, a Contingent of two regiments of Irregular Cavalry—1158 men of all ranks—seven regiments of Infantry—aggregating 6412 men —and 26 guns, with 748 Artillerymen This force was officered by Englishmen, and the men were thoroughly disciplined soldiers, as they proved in a hard fight with General Windham's brigade at Cawnpore

The Maharaja and his Minister, Sir Dinkar Rao, remained staunch and restrained, but the Contingent mutinied on Sunday, 14th June A number of women and children were sheltered by the Maharaja, but had to be removed to Dholpur, and thence to Agra. After this Gwalior remained quiet for a time

On the 22nd May 1858 at Kalpi, the mutineers, led by Tantia Topi and the Rani of Jhansi, were severely defeated by Sir Hugh Rose They moved on Gwalior, and on the 1st June Scindia, with his own troops, moved out from Gwalior to meet them about 2 m E of Morar. But there was no fight. Scindia's bodyguard alone offered any resistance The Maharaja was compelled to fly, and made his way to Agra, where he was followed by his minister

The Rani thereupon seized the

[1] Now represented by the Maharaj Rana of Dholpur (p. 186).

[1] This Prince was wounded at the Battle of Panipat (p. 301), where one of his brothers was killed. Two more brothers fell in other engagements.

fort of Gwalior, and proclaimed the Nana Sahib as Peshwa. Sir Hugh Rose immediately marched upon Gwalior. As he neared it he was joined by Sir Robert Napier (Lord Napier of Magdala), who took command of the 2nd Brigade, and by the Hyderabad troops. On 16th June he came into touch with the rebels at Bahadurpur, near Morar In spite of the long and fatiguing march, Sir Hugh attacked the enemy at once, and drove them from their position The main body of the enemy fell back through the Cantonments on a dry nulla with high banks, running round a village which they occupied Here they maintained a desperate hand-to-hand struggle The 71st Highlanders suffered severely, and it was not until the nulla was nearly choked with dead that the village was carried The victory was completed by a successful pursuit of the rebels by the 14th Light Dragoons

Early next morning (the 17th of June) Brigadier-General Smith, marching up from Jhansi, reached Kotah-ki-sarai, 5 m to the S E of Gwalior, without opposition There he discovered the enemy in great force, and showing a disposition to attack. The ground in front of him was impracticable for cavalry, and the enemy's guns were in position about 1500 yds. from Kotah-ki-sarai, and their line lay under the hills, crossing the road to Gwalior. He sent his horse artillery to the front, and silenced the enemy's guns, which limbered up and retired He then sent his infantry across the broken ground, under the command of Colonel Raines of the 95th Charging at the double, they found themselves stopped by a deep ditch with 4 ft. of water, but it was crossed in single file and the entrenchment was gained. Meanwhile General Smith moved his cavalry across the river Umrah, close to Kotah-ki-sarai. They had hardly crossed when they came under fire of a battery At the same time a body of the enemy threatened the baggage at Kotah-ki-sarai General Smith sent back detachments to defend the baggage and rear, and pushed forward The road, before debouching from the hills between his position and Gwalior, ran for several hundred yards through a defile along which a canal had been excavated Having gained the farther end of the defile, where he joined Colonel Raines, General Smith halted the infantry to guard it, and ordered a cavalry charge This was most gallantly executed by a squadron of the 8th Hussars, led by Colonel Hicks and Captain Heneage The rebels, horse and foot, gave way before them The Hussars captured two guns, and, continuing the pursuit through Scindia's Cantonment, had for a moment the rebel camp in their possession.

Among the slain was the Rani of Jhansi, who was wearing the dress of a man. Her horse carried her along with the other fugitives and refused to leap the canal She received a shot in her side and a cut on the head, and fell dead Her body was cremated in a neighbouring garden

Before sunset on the 19th June, Sir Hugh Rose had occupied the old town and the Lashkar, or new city, and on the following day Scindia re-entered his capital. A few fanatics in the fort alone held out. On the morning of the 20th, Lieuts. Rose and Waller of the 25th Bombay Infantry, who were on duty at the kotwali, or police-station, not far from the main gateway of the fort, took their pickets with them and a blacksmith, and crept up to the first gateway unseen This was burst open by the blacksmith, a powerful man, likewise five other gates. By the time the sixth gate had

been forced the alarm was given, and, when the assailants reached the archway beyond the last gate, they were met by the fire of a gun. Dashing on, they engaged in a hand-to-hand contest with the garrison Many fell on both sides. Rose was wounded, as he was encouraging his men to make the final charge, by a musket fired by a mutineer from Bareilly, who rushed out and cut him down. Waller came up and despatched the rebel—too late, however, to save his friend. But the rock fortress was gained. Waller received the V.C., and it would have been awarded to Rose if he had lived.

The **Old City** lies along the N.E. and N. ends of the rock. Flanking the city to the N. stands a curious old Pathan archway, the remains of a tomb. Outside the gate of the fort is the **Jami Masjid**, with its gilt pinnacled domes and lofty minarets Sir W. Sleeman says (*Rambles*, I, 347). "It is a very beautiful mosque, with one end built by Mutamad Khan, in 1661 A.D., of the white sandstone of the rock above it

On the eastern outskirt of the city is the noble **tomb of Muhammad Ghaus**, a saint venerated in the time of Babar and Akbar. It is of stone, and is one of the best specimens of Muslim architecture of the early Mughal period, built by Gwalior masons It is a square of 100 ft., with hexagonal towers at the four corners, attached at the angles to form an octagon The tomb is a hall 43 ft. sq., with the angles cut off by pointed arches, from which springs a lofty Pathan dome. The walls are 5½ ft. thick, and are surrounded by a lofty veranda, with square bays in the centre of each side, enclosed by stone lattice screens. These are protected from the weather by double eaves (Chajja), long stone slabs resting on brackets. The dome was once covered with blue-glazed tiles

The **Tomb of Tansen**, a famous musician, is a small pavilion 22 ft. sq., supported on pillars round the tombstone, close to the S.W. corner of the large tomb The tamarind tree near the grave is much visited by singers, as the chewing of the leaves is alleged to impart a wonderful sweetness to the voice Tansen was one of "The Nine Gems" of Akbar's Court.

The Fort[1] —The *main entrance* to the fort is on the N.E. Flights of broad steps, alternating with pieces of paved level road, have been removed, and there is now a continuous road Arrangements for an elephant to ascend the steep incline can be made at the foot in the case of distinguished visitors or State guests[2]

"The great fortress of Gwalior," said General Cunningham, "is situated on a precipitous, flat-topped, and isolated hill of sandstone," which rises 300 ft above the town at the N. end, but only 274 ft at the upper gate of the principal entrance. The hill is long and narrow; its extreme length from N. to S. is 1¼ m., while its breadth varies from 600 ft to 2800 ft. The walls are from 30 ft. to 35 ft. high, and the rock immediately below them is steeply but irregularly scarped all round the hill.

[1] *Gwalior Fort Album*, published by the Archæological Department, Gwalior. Sold at the Archæological Museum. Price Rs 1, 8

[2] Permission is no longer required. Distinguished visitors sign their names in a book at the entrance to the fort. A nominal fee of two annas is charged for others.

The view from the fort is varied and extensive, but, except during the rainy season, when the hills are green, the general appearance of the country is brown and arid. To the N., on a clear day, may be seen the gigantic temple of Suhania, about 30 m. distant, and still farther in the same direction the red hills of Dholpur. To the W., and within gunshot, lies the long, flat-topped sandstone hill of Hanuman, with a basaltic peak at the N. end and a whitewashed temple on its slope, whence the hill has its name Beyond, far as the eye can reach, nothing is seen but range after range of low sandstone hills. The conical peak of the Raipur hill towers over the lower ranges in the S., and to the E. the level plains, dotted with villages, lengthen till they pass out of sight. On the plain below lies the Old City of Gwalior, encircling the N.E. end of the fortress, and to the S., upwards of 1 m distant, is the New City of *Lashkar*.

The entrance is protected by six **Gates** which, beginning from below, are :—

The *'Alamgiri* Gate, built by Mu'tamad Khan, Governor of Gwalior, in 1660, and called after Aurangzeb, whose title as Emperor was 'Alamgir It is quite plain, and the inscription is obliterated. Inside is a small courtyard and an open hall in which the Muslim Governors sat to dispense justice.

The *Badalgarh* or Hindola Gate takes its name from the outwork Badalgarh, which was called from Badal Singh, the uncle of Man Singh. This gate is also called Hindola, from *hindol*, "a swing," which existed outside It is a fine specimen of Hindu architecture, contemporary with the Gujari Palace. An inscription on an iron plate which recorded its restoration by the Governor Saiyad 'Alam in 1648 no longer exists.

Close under the rock to the right is the stately **Gujari Palace**, built by Man Singh for his favourite Gujari Queen Niriganayana. It measures 300 ft. by 230 ft., and is two storeys high. It is built of hewn stone, and was once a very fine building. The **Archæological Museum**, which was opened during his visit in 1922 by the Duke of Windsor as Prince of Wales, contains Brahman and Jain sculptures, inscriptions,[1] and miniature paintings There is a fine set of copies of nine frescoes in the Caves of Bagh (p. 148). The Museum[2] is closed on Mondays

The *Bhairon*, or Bansur Gate, which has been removed, was the work of one of the earliest Kachhwaha Rajas It was called Bansur, from *bansur*, "archer"—literally a "bamboo-splitter,"—from the guard which had the charge of it

The *Ganesh* Gate was built by Dongar Singh, who ruled 1424 to 1454. Outside is a small outwork called *Kabutar Khana*, or "pigeon-house," in which is a tank called Nur Sagar, 60 ft. by 39 ft and 25 ft deep Here, too, is a Hindu temple sacred to the hermit *Gwalipa*, from whom the fort got its name It is a small, square, open pavilion, with a cupola on four pillars There is also a small mosque with a chronogram giving a date corresponding to 1664 A.D.

Before reaching the *Lakshman* Gate is a temple hewn out of the solid rock and called *Chaturbhuj-mandir*, "shrine of the four-

[1] The territory of the Gwalior State is rich in buried monuments, and excellent work is being done by the Archæological Department in the direction of excavation and preservation, notably at Mandasor (p. 152), Chanderi (p. 169) and Bagh (p. 148).

[2] See *A Guide to the Archæological Museum at Gwalior*

armed," sacred to Vishnu, inside which, on the left, is a long inscription, dated Sambat 933=876 A.D. It is 12 ft. sq., with a portico in front 10 ft. by 9 ft., supported by four pillars. There is a tank here, and opposite to it the tomb of Taj Nizam, a noble of the Court of Ibrahim Lodi, who was killed in assaulting this gate in 1518 A.D. An awkward flight of steps leads to the *North-Eastern group* of Jain Statues in a cliff (p 184) The sculptures are small, and unaccompanied by inscriptions, and are, therefore, unimportant, some of the caves are large. Farther S, on the face of the rock, are carvings of Mahadeva and his consort and about fifty lingams A colossal figure, 15½ ft high, of Siva slaying the demon Gaja, who had assumed the body of an elephant, which is seen as a canopy at the top, is one of the oldest sculptures in Gwalior

The *Hathiya Paur*, or Elephant Gate, was built by Man Singh, and forms part of his palace Here was the carving of an elephant, which Babar and Abul-Fazl praised Inside the Hathiya Paur and under the S end of the Palace of Man Singh was the *Hawa* Gate (now removed), a cool draught of air justified the name

Turning to the right on reaching the level of the fort, the five palaces under which the ascent has passed may be first visited. The first of these is the **Man Singh Palace** (1486-1516, repaired in 1881), also called the *Chit Mandir*, or Painted Palace, as "the walls are covered with a profusion of coloured tiles—bands of mosaic candelabra, Brahmani ducks, elephants, and peacocks—enamelled blue, green, and gold, giving to this massive wall an unsurpassed charm and elegance. The tiles of the great windowless S. wall possess a brightness and delicacy of tint unblemished by the four centuries which they have weathered Nowhere do I remember any architectural design capable of imparting similar lightness to a simple massive wall" (Rousselet)[1] The palace was greatly admired by King Babar (1527). It is two storeys high, with two storeys of underground apartments, now uninhabitable from the bats. Intended as cool apartments in the summer, they were used by the Mughals as a State prison The last King of Ahmednazar died here (1600), and Aurangzeb confined his brother Murad in 1659 until he died in 1661. The E face is 300 ft long and 100 ft high, and has five massive round towers, surmounted by open-domed cupolas, and connected at top by a battlement of singularly beautiful open lattice-work The S. face is 160 ft. long and 60 ft high, with three round towers connected by a battlement of lattice-work The N and W sides are somewhat ruined The rooms are arranged round two courts—small, but with singularly beautiful decoration

The *Vikramaditya Palace* (1516), between the Man and Karan Palaces, is connected with them by narrow galleries

The **Karan Palace** should be called the Kirti Mandir It is long and narrow, and of two storeys. It has one room 43 ft by 28 ft, with a roof supported by two rows of pillars. There are smaller rooms on either side, and bath-rooms below, with some fine plaster-work on the domed ceilings. Close by to the S is a hall (1516 A.D.) 36 ft sq., with a roof in the form of a Hindu dome, supported on eight carved ribs, of which four spring from the side pillars and four from the angles of the building Internally the top of the dome is a flat square formed by the intersection of the

[1] *India and its Native Princes*, by Louis Rousselet (Chapman & Hall, 1876)

ribs. The roof is flat, and once had a pavilion on it.

The **Muslim Jahangiri and Shah Jahan Palaces** at the N. end of the fort are of rubble plastered quite plain.

A little to the N W of them is the Johar tank, so called from the immolation of Rajput women, just before the fortress was taken by Altamsh in A.D. 1232. On the W. wall slightly to the S, and just above the Dhonda Gate, are the ruins of the buildings known as the Nauchauki or Nine Cells, also used as a State prison in the time of the Mughal Emperors The narrow, steep staircases leading to the dungeons can still be traversed

On a salient on the eastern verge of the rock, and a furlong to the S of Man Singh's Palace, are the two **Sasbahu** temples, and from the walls near by a fine view is obtained of the Eastern cliff of the fortress The word Sas-bahu means "mother-in-law and daughter-in-law," two similar objects standing side by side. The larger temple is 100 ft long by 63 ft broad An inscription in Sanskrit in the porch records that it was commenced by Raja Padmapala, of the Kachhawaha dynasty, and completed in A D 1093 by Raja Mahi Pal, his brother. The entrance is to the N, and the shrine to the S. The temple is now 70 ft high, but the spire (*sikhara*) has disappeared, and it may have been 100 ft high It stands on a richly-carved plinth. There are figures of Vishnu over the main entrances, but the temple is probably Jain. The central hall is 31 ft. sq. It is crowded with four massive pillars to aid in bearing the enormous weight of its great pyramidal roof.

The smaller temple is cruciform, and is open on all four sides. The body is 23 ft. sq., supported on twelve pillars The plinth is 6 ft. high, and is decorated like that of the great temple The pillars are round, with octagonal bases and bracketed capitals. The lower parts of the shafts in both temples are ornamented with groups of female dancers. They are fine specimens of the ornate style of mediæval Hindu architecture

From this point it is necessary to cross again to the W. side, where the Teli-ka-mandir stands, passing the Suraj Kund tank *en route* This tank is 350 ft by 180 ft, and is believed to be the oldest reservoir in the fort.

The **Teli-ka-mandir**[1] (probable date, 9th century, restored 1881-83) is 60 ft sq, with a portico projecting 11 ft. on the E. side The sides slope upwards to 80 ft, where the building ends in a horizontal ridge 30 ft. long. It is the loftiest building in Gwalior. The doorway is 35 ft high, and has a figure of Garuda over the centre It was originally a Vishnavite temple, but since the 15th century it has been Saivite. The name appears to be a corruption of *Telangana*, and from the Dravidian style of the spire, it has been thought that the architect was a Telangana, or Telugu The whole is covered with sculptures. The gateway in front of it was formed out of fragments found in the fort by Major Keith, R E, who was entrusted with the repairs and restorations made in 1881-83 Archæological fragments placed round the temple were discovered in various parts of the fort during Major Keith's operations

There are two tanks close to the cliff of the Western Arwahi ravine, the Ek Khamba tank on

1 "Oilman's Temple", see Fergusson's *Indian Architecture*, 2, 130

the N. with a pillar in it, and the Chamar, close to which is the point, still called Faringhi Pahar, of Major Popham's escalade in 1780. Colonel White's breach (1803) was made just S of the Ghargaj Gate

At the S. point of the fort are interesting tanks (Dhobi Talao, Rani Talao, Chedi Talao) with a view of Lashkar. The military buildings in the S. portion of the Fort are now used for a residential school, mainly intended for the sons of noblemen in the Gwalior State, and conducted on the lines of an English Public School.

Returning from the S, past the Gangola tank, the route may be pursued past the Suraj Kund to the gate which forms the entrance to the Arwahi ravine, *on the farther side of which is* the Mansarowar tank The S end of the ravine is closed by a wall with a double gate, near which are the wells which supply the fort with drinking-water; and on either side of it, from the bottom of the steep descent from the N. gate, are the Jain statues of the Arwahi group

"These **Rock Sculptures** of Gwalior," wrote General Cunningham, "are unique in Northern India, as well for their number as for their gigantic size They are all excavated in the steep cliff immediately below the walls of the fortress, and are most of them easily accessible. There are small caves and niches in almost every place where the face of the rock is tolerably smooth and steep, but the more prominent excavations may be divided into five principal groups, which I will designate according to their positions, as 1st, the Arwahi group; 2nd, the South-Western group; 3rd, the North-Western group; 4th the North-Eastern group, 5th, the South-Eastern group. Of these the first and the last, which are by far the most considerable both in number and size, are the only sculptures that have attracted travellers." Most of them were mutilated by order of the Emperor Babar, 1527 A.D, only seventy years after they were made Babar himself records the fact in his memoirs: "*I directed these idols to be destroyed.*" The statues, however, were only mutilated, and the broken heads have since been repaired by the Jains with coloured stucco

The *Arwahi group* consists of twenty-two principal figures, which are accompanied by six inscriptions, dated Sambat 1497, 1510=1440 A D and 1453, during the sway of the Tomara Rajas. The chief statues are. No. 17, a colossal figure of Adinath, the first Jain pontiff, who is known by the symbol of a bull on the pedestal. This has a long inscription, dated 1440 A D, in the reign of Dongar Singh The largest figure, the colossus, No 20, is 57 ft. high, six and a half times the length of the foot, which is just 9 ft. The extreme W. figure of this group, No. 22, is a seated colossus upwards of 30 ft. high, of Nemnath, twenty-second Jain pontiff, known by a shell on the pedestal.

"The *South-Western group*, just outside the Urwahi wall, consists of five principal Jain figures No. 2 is a sleeping female 8 ft. long, lying on her side, with her head to the S. and face to the W. No 3 is a seated group of a male and female with a child, who are Siddhartha and Trisala, the reputed father and mother of the infant Mahavira, the last of the twenty-four Jain pontiffs. The sleeping female also is probably intended for Trisala" S of this group is the Gargaj Gate (closed). A car should be ordered to the ravine exit, for the Jain sculptures on the S.E. face are more than a mile from this

point, by a road to Lashkar, and round to the last group.

The *South-Eastern group* is the most important group of colossal statues which occupy the whole face of the cliff for upwards of ½ m. They are all of date 1468-1473 A.D., and are the latest of such works in India. In many cases a screen-wall has been left in front of the excavations as at Ellora. The table gives details of each statue.

Caves S.E. Group.		Sculptures			
No.	Front depth and height	Names	Position	Height	Symbol
	Feet.			Feet.	
1	23×21×27	—	—	30	—
2	10×10×10	—	—	—	—
3	15×12×17	Adinath	Standing	7	Bull
		4 others	—	—	—
4	15×14×16	Adinath	—	14	Wheel
		Neminath	—	—	Shell
5	—	Adinath	—	—	Bull
6	26×12×16	Supadma	Sitting	15	Lotus
7	15×10×20	—	Standing	20	—
8	27×10×20	Adinath	Sitting	6	—
9	16× 7×28	Male Figure	Standing	21	—
10	10× 7×15	Female	Lying	—	—
		Chandra Prabha	Standing	12	—
		2 others	—	12	—
11	12× 8×25	Chandra Prabha	Sitting	21	Crescent
12	31×10×25	Sambhunath	—	21	Horse
13	40×10×25	Nemnath	Standing	21	Shell
		Sambhunath	Sitting	—	Horse
		Mahavira	Standing	—	Lion
14	26×16×32	Adinath	Sitting	20	Bull
15	26×16×33	Adinath	Sitting	28	—
16	24×22×34	—	—	30	—
17	80× 8×30	Kantanath	Standing	26	Goat
		Shantanath	Sitting	26	Antelope
		Adinath	Sitting	26	Wheel
		And 4 others	—	26	—
18	15×10×30	—	Standing	26	—
19	16×10×30	—	—	20	—
20	12× 8×10	Adinath	—	8	Wheel
21	27×35×15	—	—	—	—

The *North-Western group* is best visited by passing round the N. side of the city; the figures, however, are insignificant.

The New City, or Lashkar.—When Daulat Rao Scindia obtained possession of Gwalior in 1809, he pitched his camp to the S. of the fort, and a new city (pop. 182,492 in 1941) still retains the name of Lashkar, or The Camp. The *Sarafa*, or Merchants' Quarter, is the Chandni Chauk of Gwalior. In the *Phul Bagh* are the *Jai Bilas* and *Moti Mahal Palaces*. In the centre of Lashkar is the Jayaji Chauk and the *Barah*, or *Old Palace*. The King George Park close by contains a Hindu temple, a Muslim mosque, a Sikh *gurdwara*, a Theosophical lodge and a statue of Maharani Sankhya-raja Sahiba (d. 1919), also another Museum (1910).

The water supply comes from Tigra reservoir, 9 m. W., on the Sank river.

The later buildings worthy of a visit are the *Dufferin Sarai*, the *Jinsi Building*, the *Jayaji Rao Memorial Hospital*, and the *Victoria College*, *Maharaja*

Jayaji Rao's Cenotaph, the *Electric Printing Press*, the *General Post Office*, the *Theatre Hall*, and *Market*; the foundation-stone of the Market was laid by the Duke of Connaught, and with the electrical installation it was opened by King George V. (then Prince of Wales) in December 1905. The New Race-course, on the road connecting Lashkar and Morar, is used by Gwalior Sports Association for All-India and other matches The old race-course was N.W. of Morar

The Madho Sagar Lake is a flying-boat base

Lashkar presents a scene of the utmost animation at the Dasehra festival in October procession to the State temple at the Gurki, also when the Muharram procession is held on the ninth day of the period of mourning annually observed by Shiah Muslims, in remembrance of the murder of Hosain at Kerbela in 680 A D In this a State Taziyah is carried

From Gwalior three N G State Railways run one S W to Shivpuri Ry. Stn (74 m), not far from which, in the Narwar jungle the rebel Tantia Topi was betrayed and captured on 7th April 1859, a second N E to Bhind (53 m), and the third W by S to Sabalgarh and Sheopur Kalan (124 m)

Shivpuri or **Sipri** (hotel motor car available), the summer capital of the Maharaja Scindia, lies on a plateau, 1300 ft above sea-level, on the Agra-Bombay road, 73 m from Gwalior, and 61 m from Jhansi, by road There is a handsome mausoleum of the mother of the late Maharaja close to it is a natural spring, the Bhadaya Kund Metalled roads run N. to Gwalior (74 m.), S. to Guna (61 m.), and E to Jhansi (81 m). The old and historic town of **Narwar** (Nalapura) can be reached by motor, 26 m. to the N. The fort has a perimeter of 5 m and is 500 ft. above the plain, with old guns A Jait Khamba has inscriptions of Tomara Rajas.

The Gwalior State owns the railway (opened 1881) as far as Agra Cantonment from 797 m. About 7 m. S of Dholpur there is a bridge over the Chambal, 2714 ft. long, built (1881) of the famous red sandstone of Dholpur, a ridge of which, from 560 ft to 1074 ft. above sea-level, runs for 60 m through the territory, and has many quarries. The river is bordered by a labyrinth of ravines, some of which are 90 ft deep and extend to a distance of 4 m from the river-banks The floods of the river are very remarkable The highest recorded flood above summer level rose no less than 97 ft

804 m **Dholpur** station (R), the chief town of the Jat State of that name, which has an area of 1200 sq m The present Maharaj Rana, Lieut.-Col H H Sawai Sir Udaibhan Singh Lokindra Bahadur, G C I E , K C S I , K C V O , was born in 1893 and succeeded his brother in 1911

The State in its present form dates from 1805, when the Governor-General (George Barlow) gave Maharaj Rana Kirat Singh, the last Jat Rana of Gohad (a State founded in 1505), three of Scindia s districts N. of the Chambal, and transferred Gwalior and Gohad to Scindia In 1658 Aurangzeb defeated his elder brother Dara Shikoh at Ran - ka - chabutra, 3 m E. of Dholpur, and in 1707 Aurangzeb's sons, Azam and Mu'azzam, contending for the crown, fought a great battle at the village of Barehta, near Dholpur, the former being killed, and the latter becoming Emperor, with the title of Bahadur Shah. The palace of Dholpur is built of red sandstone. The High School is housed in a building originally built as a mausoleum of Sadik

Muhammad (d. 1597), a general of Akbar. A State N.G. ry. runs from Dholpur to Bari, 20 m., and to Tantpur (37 m).

Among other objects of archæological interest in Dholpur State are :—(1) Shergarh fort, which is supposed to have been built some 3000 years ago by Raja Maldeo. It was repaired and rebuilt by several Rajas in the later generations. In 1540 Sher Shah, of the Sur dynasty, who drove Humayun out of India, restored it and gave it its present name of Shergarh. It was lastly used by Maharaja Rana Kirat Singh in the early part of the 19th century; but is crumbling away. (2) The fort of Bari, which was built by the Ghori King Firoz Shah in A D 1286 It is now used as headquarters of the Bari Tahsil (3) Khanpur Mahal, which is situated some 3 m to the S. of Bari, and consists of a long and picturesque series of pavilions, the principal of which are enclosed by a wall. The Mahal was built for the Emperor Shah Jahan by Safi Khan Aziz Khan, a local Mansabdar The palace was never occupied, and gradually fell to pieces. The Dholpur Darbar has repaired and renovated some pavilions. Below on Talshahi lake an annual duck shoot of the Maharaj Rana is held (4) Mach Kund, a historical tank surrounded by temples both ancient and modern, the older falling to pieces. It is considered to be a sacred place, and its name is traced back to a Raja Mach, twenty-fourth of the Surajbansi, who reigned nine generations before the birth of Sri Ramchandra (5) Ram Sagar. This is an extensive irrigation tank constructed by Maharaj Rana Ram Singh (1901-11), to supply water to the surrounding villages in Tahsil Bari.

835 m. from Bombay, **Agra Cantonment** station where travellers by this route alight for the hotels (Route 13). The G I P line runs through the Raja-ki-Mandi station (where there is a branch to Agra city on the E.I.R.) to

868 m **Muttra** junction (p. 249), passing **Sikandra** (p. 272) From Muttra the line continues as in Route 12 to

957 m **DELHI** Main Station (Route 14)

ROUTE 10

BOMBAY to DELHI by **Surat, Broach, Miyagam** (for Dabhoi), **Baroda** and **Ahmedabad**, by broad-gauge, thence by metre-gauge of the B B. and C.I to Delhi (849 m) by **Mehsana, Palanpur, Abu Road** (for **Mt. Abu**), **Marwar** junction (for **Luni** junction, branch line to Hyderabad, Sind and Karachi), **Jodhpur Merta Road** (for **Bikanir**), **Ajmer, Phalera** junction, JAIPUR, **Bandikui** junction, **Alwar, Rewari,** and **Gurgaon**

Both the "Kathiawar Mail" (Route 11) and the "Gujarat Mail," which leave the Central station in Bombay city of the B.B. and C.I. Ry, run over the broad-gauge This railway was opened from Bulsar to Ahmadabad in 1860-63 and was brought into Grant Road in 1864, being extended to Church Gate in 1870 There was also a terminus at Colaba but the line from Church Gate was dismantled (1933) to give access to Back Bay. From Ahmedabad the journey to Delhi is continued over the metre-gauge system worked by the same ry. to Marwar jn, where passengers for Hyderabad (Sind) and Karachi change carriages From Marwar jn. the metre-gauge Delhi Mail proceeds to Ajmer, Jaipur, Bandikui, Alwar and Rewari Total distance to Delhi 845 m

6 m **Mahim** station, where the railway crosses a causeway connecting the island of Bombay with the island of Salsette. There was a Portuguese fort here The Mahim causeway was constructed (1864) largely at the expense of the first Lady Jamsetjee Jeejeebhoy

7 m. **Bandra** (see p. 30).

9 m. **Santa Cruz** a frequent meet for hounds

19 m **Borivli**; 25 m **Bhayndar**; 30 m. **Bassein Road** (see p. 32).

At 29 m. the railway crosses the Bassein creeks, the S bridge is 4313 ft long (1864) and the N 1611 ft

44 m the Vaiturni river (near Virar) crossed again at 45 m. Both bridges over 1000 ft long.

105 m. **Daman Road** station (P.W D B) (permit from Exec Engineer, Surat). *Daman* (7 m W) is a Portuguese settlement taken by the Portuguese in 1531, again in 1535, and finally in 1559 The town (of historic interest) is situated on the Daman Ganga river, with a bad bar and a roadstead, but in the days of small ships had a very considerable trade In the main fort, Daman Grande (once a Diocese), on the left bank, are ruins of monasteries and two churches; and also the houses of the Governor and his staff and the public offices The smaller fort of St Jerome, opposite, is more modern At Daman Paquena (7½ m.) on this bank is a Customs Inspn Bungalow, permit from Asst Commr Salt at Surat

111 m. **Udvada** station. Remarkable as containing the oldest Parsi sacred fire in India. It is said to have been originally brought from Persia by the Parsis, and first kindled at Diu in 700 A.D. The Fire-temple is modern

At 118 m. is the Par river.

121 m. **Bulsar** station. Near it is the village of **Tithal**, on the sea-

coast, where many inhabitants of Gujarat resort in the hot season There are fine sands. Motor service from Bulsar E. to Dharampur (18 m.); Wilson Hills (34 m), height 2300 ft.; also to Nasik (95 m.).

At 126 m is the Auranga river

145 m. **Navsari** station The H.Q of the Gaekwar's Southern possessions, and the headquarters, from the earliest days, of the Parsi community Here the Zoroastrian Priesthood receive their initiation and confirmation There are sanatoria for Parsis at Maradi and Umreth

At 150 m. is the Poorna river, and at 156 m. the Mindhola river

163 m **Surat** stn (pop 1941, 207,237, R ,D.B.,2 m.) The name is connected with Saurashtra, or Sorath, a term applied to the neighbouring districts of Gujarat and Kathiawar, which occurs in the *Mahabharata* and the *Periplus* It is variously interpreted as meaning the "good land" or "the land of the Suras" Surat had a large trade in 1600, and in 1796, after some decline, held 800,000 people, the port being much frequented by British and other European traders

Situated on the river Tapti, it is surrounded on the land side by a wall about 5½ m. in circuit, with twelve gates Except the main street, running from the station road to the castle, the streets in Surat are narrow and tortuous, and some of them still bear marks of the great fire in 1837, which raged for nearly two days. Again in 1889 a fire broke out, which raged over twelve hours, and destroyed 1350 shops and houses. Besides fires, Surat has suffered severely from floods, the severest being in 1837, the same year as the fire, and in 1883. In 1896 Lord Elgin inaugurated here the Tapti Valley Railway, a local joint-stock enterprise (see p 42)

About the 12th century the Parsis, who were driven from Persia 500 years before, and had settled in *Sanjan*, 70 m S. of Surat, found their way here. In 1512 the Portuguese sacked the then open town On the 26th February 1573 it surrendered to Akbar after a siege of one month and seventeen days Under the Mughals, as the "Gateway of Mecca," it became a port of primary importance for trade and pilgrim traffic; and the Banyas of Surat grew fabulously wealthy The English began to trade, and in 1612 the Mughal Emperor sent a *farman* authorising an English envoy to reside at his court, and opening to English subjects the trade at Surat.[1] In 1615 Captain Downton, with four ships, mounting eighty guns, defeated the Portuguese fleet, consisting of four galleons, three other large ships, and sixty smaller vessels, mounting in all 134 guns. This victory at "Bloody Point" gained superiority over the Portuguese.

Dutch trade commenced in 1616, and for some years competed successfully with the English there. The French Factory was not founded till 1668, when the agents of the French E I Company (1664) settled at Surat. On the 5th January of the same year the prosperity of

[1] There is an excellent account (with illustrations) of the Surat factory in *British Beginnings in Western India*, by H. G Rawlinson (Oxford, 1920)

Surat received a severe blow from Sivaji, the founder of the Mahratta Empire, who with 4000 horse surprised the city, and plundered it for six days. The defenders of the English Factory, under Sir George Oxinden, who described the Mahratta leader as "Sevagye, ye grand rebell of ye Deccan," showed a bold front throughout, and recommended Sivaji to "save the labour of his servants running to and fro on messages, and come himself with all his army," and in the end were left unassailed. Their courageous defiance so pleased Aurangzeb that he sent Oxinden a robe of honour, and granted the English a reduction in customs The walls of Surat up to this time were of mud, but they were now ordered to be built of brick

In 1687 the Presidency was transferred to Bombay from Surat, which was again partially pillaged by the Mahrattas in 1670, 1702, and 1706 In 1698 the New London Company obtained a Charter, and on the 19th of January 1700 Sir Nicholas Waite, Consul for the King and President for the New Company, arrived at Surat The struggle of the Companies continued till 1708, when they were united This marked a new era for the English at Surat, then the greatest emporium of W. India The factory of the New Company is now occupied by the Irish Presbyterian Mission. A dock was built (1720), and in 1723 there were two British shipyards. In 1735 an Indiaman was launched

In 1759 the Nawab, by misgovernment and vexatious oppression of the Company's officers, provoked a conflict. The townspeople welcomed the attack, which was delivered near Athwa village, and resulted in the complete defeat of the Nawab's troops He then signed a treaty by which the castle and fleet were made over to the British for a yearly stipend of Rs.200,000. This arrangement was confirmed by the King at Delhi, and the British authority was firmly established in Surat, which was definitely taken over in 1800. In 1842 the last titular Nawab died without a direct heir, and the flag of Delhi was removed from the castle.

The Castle stands at the point where the Tapti bridge, built under the auspices of Sir Theodore Hope (Magistrate-Collector 1867), abuts on the banks of the river. It was erected by Khudawand Khan about 1546, and is a brick building with walls about 8 ft thick, much modernised There is a good view of the city and river from the S.W bastion Over the E. gateway is an inscription, and adjoining it is the well-kept *Victoria Garden*, of 8 acres. The adjoining church was consecrated by Bishop Heber in April 1825.

The remains of the original *English Factory* are near the way to the Kataragam Gate, close to the river, on the N side of the city It is doubtful whether, in spite of the tablet to that effect, the house occupies the actual site. Near it is the *Portuguese Factory*, where some records are still kept. A wooden cross marks the site of the church. Close to this are the vacant sites of the *French Lodge* and the *Persian Factory* The Dutch Factory was outside. There is a fine view of the town from the *Clock Tower*.

The **English Cemetery**, N. of the city, on the Broach road, should be visited. To the right on entering, is the massive mausoleum of Sir George Oxinden, President of Surat and Governor of Bombay, who died on 14th July 1669, and his brother Christopher (d. 1659). The structure is composed of two tombs The first, a domed building with four pin-

nacles at the corners, was erected over the grave of Christopher, and a Latin inscription in the old English character, written by his brother, was placed inside on a small marble slab. On the death of Sir George, it was enclosed in another building, similar in style, but two-storeyed, and surmounted by a dome which resembles an open cross. In the upper compartment is a large marble tablet bearing an inscription Close by is another tomb, supposed to be that of Gerald Aungier (d 30th June 1677), Oxinden's successor, it remained for years without an inscription, but now bears a tablet. There are other monuments which merit examination Out of 400 tombs, ranging in date from 1646 to the middle of the 19th century, over seventy are in memory of children under the age of five.

The adjoining **Dutch Cemetery** contains huge monuments The most striking is that of "His High Nobility" Baron Adriaan van Reede (d 15th December 1691), "Commissary for India of the United Netherlands East India Company, representing in that capacity the Assembly of the Noble Lords of the Seventeen," who was the author of the *Horius Malabaricus* and the collector of valuable books and curiosities which he sent to Holland The tomb, which is said to have been built with the intention of eclipsing that of Sir George Oxinden, consists of a double cupola of immense dimensions with a gallery above and below, supported on handsome columns. It was formerly decorated with frescoes, escutcheons and passages from Scripture, and its windows were filled with woodcarving A bill is extant charging the Dutch Company with Rs 6000 for mere repairs. It will be noticed that in the inscription, which is in Dutch, "Cochim" and "Souratte" are engraved in capital letters and "bombai" in small ones. Near the Dutch cemetery is the Armenian cemetery, with many well-carved stones, having inscriptions in the Armenian language. All the cemeteries are kept in good order at the expense of Government

The **chief Mosques** of Surat are—1 Khwaja Diwan Sahib's Mosque, built about 1530. He is said to have come to Surat from Bokhara, and to have lived to the age of 116. 2. The Nau Saiyad Mosque, "Mosque of the Nine Saiyads," on the W bank of the Gopi Lake 3. The Saiyad Idrus Mosque, in Saiyadpura, with a minaret, one of the most conspicuous objects in Surat, it was built in 1639 in honour of the ancestor of the present Kazi of Surat. 4 The Mirza Sami Mosque, built in 1540 by Khudawand Khan, who constructed the castle

The **Tombs of the Bohras** deserve a visit There are two chief **Parsi fire-temples**, built in 1823 The Hindu sect of the Wallabhacharis has three temples The **Swami Narayan** temple, with three white domes, is visible all over the city. In the two old temples in the Ambaji ward the shrines are 15 ft underground, a sign of Muslim persecution The **Shravaks**, or Jains, have forty-seven temples, some 200 years old. There are several steam *Cotton Mills* in Surat Gold and silver wire and spangle manufacture and brocade work are important industries, while carved sandalwood and inlaid work are still manufactured to some extent Silk weaving is the chief "home industry," in which Surat is largely supplanting Benares.

Beyond the Hope Bridge (3 m) is *Rander*, built on the site of a very ancient Hindu city (B C 200), destroyed by the Muslims in 1225 The Jami Masjid stands on the

site of the principal Jain temple. In the façade the bases of the Jain columns are still visible, and the doorstep is reputed to be a great idol placed head downwards. In another mosque are the wooden columns and domes belonging to a Jain temple, the only wooden remains of the kind in India.

Besides the three cemeteries in the city, there was another place of interment for Europeans at **Swally** (Suvali), the old seaport of Surat, about 12 m W., outside the mouth of the Tapti. Here, according to his friend Edward Terry, chaplain to Sir Thomas Roe's embassy to the court of Jahangir, was the grave of Thomas Coryat, the "English Fakir" and author of "Coryat's Crudities," who tramped on foot from London to India, limiting his expenses to twopence a day, which he procured by begging From the Mogul Court at Ajmer (p. 216) he walked to Surat, where he arrived desperately ill with dysentery and died in December 1617. All trace of his grave has disappeared, although local tradition identifies it with a monument in the Muslim style at Rajgari, a village near Swally. At Jajira, not far from Swally, is a lighthouse on the right bank of the Tapti, near the mouth of the river, and adjoining it is a tomb with a high dome which bears no inscription but is known as Vaux's Tomb. Vaux was Deputy-Governor of Bombay and was drowned with his wife in 1697 by the upsetting of their boat on the river.

Near Swally is the little seaside village of Dumas, the residence of H.H. The Nawab of Sachin, who, like his relative, the Nawab of Janjira (44 m below Bombay on the coast), is descended from the Sidi (Abyssinian) admirals of the coast

The Tapti Valley Railway (opened 1900) runs from Surat to Amalner (147 m.) through Nandurbar; continued by the G.I.P. Railway, 35 m., to Jalgaon (p 42).

After leaving Surat the *Tapti* or *Tapi River* is crossed by a bridge 1863 ft long (no roadway).

From (194 m) *Ankleswar* junction a branch runs (41 m.) N E. to *Rajpipla* in Rajpipla State, the present chief of which, H H. Maharaja Sir Vijaya Sinhji Chhatra Sinhji, K.C S.I. (born 1890, succeeded 1915), is well-known in English racing circles

Close to Broach the *Narbada* or *Narmada River* is passed by the Silver Jubilee bridge (1935), consisting of 16 spans of 280 ft, which replaced one built in 1861 and a second in 1881 (no roadway)

200 m **Broach** (*Bharoch*) junction (R, D B) is a place of extreme antiquity. Narrow-gauge line N W to Jambusar (30 m) and Kavi (46 m.). The author of the *Periplus, c.* 210 A D, mentions Broach under the name of Barugaza. It was then ruled by a feudatory Gurhara Prince, and subsequently fell under the rule of the Solankis, in the 10th century It is mentioned by Varamihira, a Hindu astronomer (6th century). The Muslims had appeared in the 8th century from Sind, and ruled Broach from 1297 to 1772.

In 1613 A.D it was visited by Aldworth and Withington, English merchants, and in 1614 a house was hired for a factory. The Dutch set up a factory in 1617 The Nawab did not meet obligations, and on the 14th of November 1772 the British troops stormed the place with the loss of their commander Brigadier David Wedderburn, whose tomb is at the N.W. corner of the fort. On the 20th of August 1803 Broach was again taken by the British and annexed

The city covers a strip of land 2½ m. long and ½ m. broad, hence by its inhabitants it is called Jibh, or "the tongue," and its shape is described as "Paghdi Pahna," or length like a turban cloth without the proportionate breadth. The *Fort* stands on a hill more than 100 ft above the river, and a massive stone wall lines the river-bank for about 1 m In it are the Collector's Office, the Civil Courts, the Dutch Factory, the Jail, the Civil Hospital, the English Church and School, the Municipal Office, the Victoria Clock Tower, Sir Shapurji Bharucha Institute, and the Library The streets of the city are narrow and some of them steep The Jami Masjid, lying at the E. foot of the fort, is an old Jain temple, At the W. end of the city is the spacious 'Idgah, or the Muslim place of worship on the 'Id festivals Farther on are the bungalows of Government officers and wealthy citizens At the farthest end, at the place called "Kursi," is the Rothfeld Garden, on the high bank of the river.

The Dutch tombs are 2 m. W of the fort, and some 100 yds off the road, left Two of them are from 16 ft to 20 ft high

Opposite the Dutch tombs are five *Towers of Silence*, one of them about 15 ft high. The second tower is still in use

On the N.W side of the city, at a distance of 1 m, is the tomb of Bawa Rahan, and a mosque situated on an isolated high hillock

Outside the E. gate, on the river bank, is the *Temple of Bhrigu Rishi*, from whom the town got the name of Bhrigukachha, contracted into Bharoch. The Parsi surname of Bharucha denotes a man of Broach

Broach is celebrated for its long-stapled cotton; there are spinning and weaving mills, besides ginning and cotton-pressing factories

10 m. to the E of Broach is the celebrated place of Hindu pilgrimage, **Suklatirth**, on the N or right bank of the Narbada Here a legendary Chanakya, King of Ujjain, was purified of his sins, having arrived by sailing down the Narbada in a boat with black sails, which turned white on his reaching Suklatirth Here, too, Chandragupta and his Minister Chanakya, were cleansed from the guilt of murdering his predecessor, and here Chamund, king of Anhilwara, in the eleventh century, ended his life as a penitent There are three sacred waters — the Kavi, the Hunkareswar, and the Shukal; at the second is a temple with an image of Vishnu.

Opposite Mangleswar, 1 m upstream from Suklatirth, is an island, in which is a famous *Banyan Tree*, called the *Kabir wad*, or "the fig-tree of Kabir," from whose toothpick it is said to have originated. Forbes, who visited Broach 1776-83, and was the first Collector (1803), says, in his *Oriental Memoirs* (1, p 26), that it enclosed a space within its principal stems 2000 ft. in circumference It had 350 large and 3000 small trunks, and had been known to shelter 7000 men Bishop Heber, in April 1825, wrote that, though much had been washed away, enough remained to make it one of the most noble groves in the world. A small temple marks

the spot where the original trunk grew.

225 m. **Miyagam** junction for a system of narrow-gauge railways (2′ 6″) owned and worked by the Baroda State, and which cannot be detailed.

Dabhoi junction, 20 m E from Miyagam, is a town belonging to the State of Baroda, birthplace of the Gujarat style of Hindu architecture [1] The fort is said to have been built by the Vaghela king of Patan or Anhilwara (p. 206), Jayasimha Siddharaja Chapotkaha or Chavana, in the 13th century There are four gates

On the *Baroda Gate*, 31 ft high, with pilasters on either side, the carvings represent the incarnation of Vishnu, and nymphs sporting with makras or crocodiles Near this are colonnades in the fort walls affording shelter to the garrison The S , or Nandod, Gate is 29 ft high and 16 ft 4 in wide Trees have grown in the walls and fractured them with their thick roots. The Hira (diamond) Gate, on the E , is 37 ft high and a marvel of minute carving About 10 ft up, in the N face of the centre, a man and woman are carved, 4 ft high, standing with a tree between them, like representations of Adam and Eve. To the left is the figure of a devil. High in the centre face is an elephant, under which the builder of the gate is said to have been interred. Outside is the Vaijanartha shrine On the N. side of the town is the former palace. On this side there is the Mori Gate. On the left, looking out from inside the tower, is the temple of Mata Kali, a wondrous example of carving, which is now much worn by the weather. Dabhoi was taken by Gen. Goddard in 1780

From Dabhoi junction a branch railway runs 10 m S. to **Chandod** station, a celebrated place of Hindu pilgrimage, owing to its situation at the confluence of the *Narbada* and the *Or*. Thousands flock there every full moon

Another line runs from Dabhoi 23 m. E. to Bodeli, and to Chota Udaipur (46 m), the capital of the State of that name (not to be confused with the great Rajput State of Udaipur or Mewar) There are two other railways

244 m from Bombay is **BARODA** * (D B , ½ m , R), capital of the Gaekwar The State covers an area of 8164 sq m The early Gaekwars were Damaji, the founder of the State, who died in 1721 , Damaji II (1732-70), Rao II , and Govind Rao. H H Maharaja Sir Sayaji Rao III. Gaekwar, G C S I , G.C I E , was born in 1863 and succeeded in 1875, and died 1939 His successor is H H Colonel Shrimant Pratapsinghji A new constitution was framed in 1940

W. of the railway station are situated the residences of many high officials, and the State Guest-House (Baroda Hotel) for guests of H H , as well as for visitors E of the station is the city (pop. 153,301 in 1941), with the College, affiliated to Bombay University, Museum, and Picture Gallery (1894) in the Victoria Diamond Jubilee Institute, the *Baroda General Hospital*, the *State Offices* and *Library*, the Juna Kot, etc. The Vishvamitri River flows between the railway station and the city, and is spanned by four stone bridges

[1] See *The Antiquities of the Town of Dabhoi in Gujarat*, by J. Burgess and H Cousens (1888) The book, however, is scarce.

The city is intersected at right angles by wide thoroughfares, which meet in a market-place, where there is a square Muslim pavilion, a clock tower, and the old Nazar Bagh Palace (1721) with a Shish (mirror) Mahal. One gold and one silver gun of the State are kept in the L.F. Battery The gold gun contains 280 lb weight of solid gold, and is drawn by splendid milk-white bullocks, stabled hard by. The **Lakshmi Vilas Palace**, which is built in the Indo-Saracenic style of architecture, cost 60 lakhs of rupees Passes must be obtained from the Khangi Karbari to H.H. the Gaekwar.

N of the city are the *Cantonment* and *Residency*. The *Anglican Church* was consecrated by Bishop Heber in 1825, and in 1838 was almost entirely rebuilt There is a good public garden with a zoological collection on the banks of the river, between the Cantonment and the city

Baroda is supplied with water from the artificial *Ajwa Lake*, 12 m distant, completed in 1890 by an Indian engineer, Mr Jaganath Sadashiv The aerodrome (1937) is at Harsi. Free education has been compulsory since 1904.

The palace at **Makarpura** is 4 m. S of the city. The *Naulakhi Well*, 50 yds. N., is a fine structure of the Baoli class

The *Baolis*, in Gujarat, are large wells. According to Mr A Forbes, in his work on Gujarat, the *Ras Mala*: "There remain in different parts of the country examples of two kinds. Some are large circular wells containing galleried apartments; others are more properly described as *waos*, or *baolis*. The *wao* is a large edifice, of a picturesque and stately, as well as peculiar, character. Above the level of the ground a row of four or five open pavilions, at regular distances from each other, usually square in the interior, but sometimes, in the larger examples, passing into the octagonal form within, is alone visible; the roofs are supported on columns, and are, in the structures of the Hindu times, pyramidal in form. The entrance to the *wao* is by one of the end pavilions, thence a flight of steps descends to a landing immediately under the second dome, which is now seen to be supported by two rows of columns, one over the other. A second flight of steps continues the descent to a similar landing under the third pavilion, where the screen is found to be three columns in height. In this manner the descent continues stage by stage, the number of the columns increasing at each pavilion, until the level of the water is at last reached The last flight of steps conducts to the most adorned portion of the *wao*, an octagonal structure, in this position necessarily several storeys high, with a gallery at each storey, and covered by a dome. The structure, which is sometimes 80 yds. in length, invariably terminates in a circular well" Another fine *baoli* may be seen at Adalaj near Ahmedabad (p. 205).

The broad-gauge line of the B.B. and C I. Rly., the route from Bombay to Delhi (865 m.), turns N.E. to Champaner Road, 267 m; Ratlam, 404 m., Nagda, 434 m; Kotah, 570 m., and Muttra, 771 m., where it connects with the G.I.P. Ry. (Route 12). An excursion to Champaner and Pavagadh and another to Dabhoi can be made

The main broad-gauge to Ahmedabad continues to

259 m. Mahi river, bridge 1748 ft. long

266 m. from Bombay, **Anand** junction, known for its creamery

(*a*) A branch line (opened 1882) runs N.E. to **Godhra**, 49 m. (p 247)

At 19 m (D B) **Dakor** station, there are a large lake, and a temple with an image much venerated by the Hindus, with a pilgrimage in October and November

About 20 m N. of **Dakor** is the walled town of Kapadvanj (below).

Midway between the two places are the hot springs of **Lasundra**, the highest temperature being 115°. The water is slightly sulphurous, and is efficacious in skin diseases.

At 33 m is the Mahi river bridge, 1920 ft long

(*b*) Another line runs S.W. 14 m. to the town of **Petlad**, and 33 m. to **Cambay**, capital of a Muslim State The ruling Nawab was born in 1911 and succeeded in 1915

This port of Ahmedabad is of great antiquity, described by the Arab traveller Masudi in A.D 913 as standing on the shores of a deep bay surrounded by towns, villages, farms, cultivated fields, trees, and gardens It was governed by the kings of Anhilwara (the modern Patan) up to 1400 A D. Muslim writers then called it the "first city in Hind" The beauty and wealth of the country led to its invasion by Ala-uddin in 1304, when the city was plundered and its temples destroyed

Cambay reached the height of its glory about 1600 A.D. The **Muslim Kings of Gujarat** (1485-1535) are often known as "Kings of Cambay." In the second canto of *Hudibras* (1674) mention is made of the "Prince of Cambay," whose "daily food is asp and basilisk and toad." Butler evidently followed Lodovico di Varthema's remarkable stories of Mahmud Bigara, the famous Sultan of Gujarat. In 1583 letters carried by Fitch, Leedes, and Newberry from Queen Elizabeth, were addressed to Akbar, as king of Cambay The Portuguese and Dutch had already established factories here; in 1613, when the English appeared, it was still a flourishing city, and, although declining as Surat increased in importance, the factory continued to 1722 It was plundered more than once by the Mahrattas; at the same time the entrance to the harbour began to silt up, and it is now unimportant.

Cambay was formerly a stronghold of the Jains, and still possesses some of their MSS, second only to those at Patan. The *Jami Masjid* (1325), built with fragments of Jain and Hindu temples, contains the tomb of Imrar Ahmed Kajarani The Nawab's *Kothi* (residence) was the old English factory

The town is celebrated for the manufacture of agate, cornelian, and onyx ornaments.

The main line continues from Anand to

277 m **Nadiad** junction A branch line (metre-gauge) runs N. to Kapadvanj, 28 m. (D.B), noted for its glass, soap, and leather jars for *ghi*. Nadiad is the most important town in the Kaira district.

288 m. **Mehmadabad and Kaira Road** station. Mehmadabad was founded by Mahmud Bigara in 1479 There is a fine tomb 1½ m

E. of the town, built in 1484 in honour of Mubarak Saiyad, a Minister of Mahmud. "There is a simplicity about its plan, a solidity and balance of parts in the design, which is not always found."—(Fergusson) A double veranda and screens of tracery give a subdued light. Mahmud Bigara also constructed the *Bhamara Baoli* (well), which is passed on the way to the tomb. It has two stone arches, on which it was said the king's swing was hung. It is 74 ft long by 24 ft broad, is entered by four winding stairs, and has eight underground chambers

Kaira, 7 m. (public conveyances), is said to date from 1400 B.C. Chalukya copperplate grants show that the city was in existence in the 5th century The chief industry is printing cloth for saris and other native garments In the centre of the town is the Court House, a building with pillars of a Greek order Near it is a Jain temple, with beautiful dark wood carving. Kaira was formerly of importance, being on the main route from Cambay to N India, and the boundary of British possessions. It was a large military Cantonment, but proved unhealthy for Europeans. The large church was consecrated by Bishop Heber in 1822, and had a beautiful bell, which has been removed to St Paul's Church, Poona

The Nilgai (*Portax pictus*), antelope (*Antilope bezoartica*), and Indian gazelle (*Gazella Bennettii*) are common. The Sarus (*Ardea Antigone*) is a tall grey crane with a crimson head. Wild-fowl, bustard (*Eupodotis Edwardsii*) and florican (*Sypheotides auritus*), partridges and quails, sand-grouse, plovers and bitterns and green pigeon, are found everywhere The mahsir (*Barbus Mosal*) is found in the Mahi, Vatrak, Meshwa, and Sabarmati rivers, and affords excellent sport

At m 292 is the Vatrak river.

306 m **Ahmadabad** (strictly correct spelling, but usually spelt Ahmedabad) Jn. * (alt 180 ft) The "Kathiawar Mail" proceeds along the broad-gauge section to Viramgam (Route 11), but connects with the metre-gauge Delhi Mail, drawn up alongside.

This most beautiful city[1] (pop 591,267 in 1941) covers 2 sq. m on the left bank of the Sabarmati river The remains of an old wall, with twelve gateways, surround it. No one should pass this ancient capital, the stronghold of the Northern Jains, without breaking the journey (four hours) to visit the Jami Masjid, the *Tombs of the Queens*, and the Rani Sipri Mosque

Ahmadabad, once the greatest city in Western India, is said to have been from 1573 to 1600 the "handsomest town in Hindustan, perhaps in the world." In Sir Thomas Roe's time, 1615, "it was a goodly city as large as London" It was founded in 1411 by Sultan Ahmad I., second King of Gujarat, who made Asaval, the old Hindu town, now included in the S. part of the city, his capital It passed through two periods of greatness, two of decay, and one of revival. Until 1511 it grew in size and wealth; but then it declined with the decay of the dynasty of Gujarat. From 1573, when it was taken by Akbar, to 1709

[1] Map faces p. 204

it recovered under the Mughals, from 1709 to 1779 it dwindled with them; and it has again increased. It is an enormous centre of the cotton trade.

It is supplied with filtered water obtained from wells sunk in the bed of the river, the main streets are supplied with electric light.

The Cantonment and Aerodrome lie 3½ m N E of the city from the Delhi Gate. Here there is an Anglican Church, and there is another, **Christ Church** (2), in the *Idaria Quarter*, 500 yds S of the Delhi Gate The old English cemetery is close to the Jamalpur gate

It is hard to account for the scant attention paid to Ahmadabad by modern travellers from Europe. Although Jahangir is said to have called it Gardabad (the city of Dust), it certainly ranks high amongst the cities of India for the beauty and extent of its architectural remains.[1] Its architecture is an interesting and striking example of the combination of Hindu and Saracenic forms The *Jain feeding-places for birds*, called "parabdis" which at the first glance look like pigeon-houses, may be seen in many of the streets, and are a peculiar feature Many of the houses in the streets have fronts beautifully ornamented with wood carving

The old parts of the city are divided into quarters wholly separated off from one another and named "pols." The buildings should be seen in the following order:—

The Jami Masjid and Tombs of Ahmad Shah and his wives (12 and 14); **the Rani Sipri Tomb and Mosque** (18); **Dastur Khan's Mosque** (7), **the Bhadar** (10); **Shaikh Hasan's Mosque** (1); **the Rani** (or Queen's) **Mosque in Mirzapur** (3), **Muhafiz Khan's** Mosque (4).

With a second morning to spare, the visitor should take a car to Sarkhej, across the river to the S W, giving himself *at least* four hours for the trip. A second afternoon can be devoted to the Kankariya Tank and Shah Alam, S of the city, and perhaps the modern Jain Temple of Hathisingh, outside the Delhi Gate, but extensions to the city may make a guide necessary

Near the railway station are handsome lofty minarets and an arched central gateway, which are all that remain of a mosque (7) [1] which was destroyed when the Mughal commander, Jawad Mard Khan, surrendered Ahmadabad to the Mahrattas in 1753

The **Jami Masjid** (12), or *principal mosque*, stands near the centre of the city, on the S. side of the main street (Manik Chauk), a little E of the Three Gateways. It was built by Sultan Ahmad I (Ahmad Shah) in 1424 The mosque is entered from the N. by a flight of steps On the S is another porch leading into the street, and on the E is the enclosure, in which is the tomb of the founder. The court is surrounded by a cloister. To the W is the mosque proper On the threshold of the main arch, embedded in the pavement, lies a black slab brought from Chintaman's Temple, which, according to Sir T. Hope, is a Jain idol turned upside down for the faithful to tread on, and touching it on the E. is a white marble crescent, where the Imam stands to lead the prayers

In the right-hand corner on entering is a gallery, probably used by the members of the Royal Family. The roof, sup-

[1] The amplest details of the architecture of Ahmadabad will be found in a volume of the *Archæol Survey of N India*, by Dr. Burgess

[1] These numbers in brackets refer to the numbers on the accompanying plan.

ported by 260 columns, has fifteen cupolas, with galleries round the three in front. The centre cupola is larger and much higher. The two "shaking" minarets lost half their height in the earthquake of 16th June 1819 They are now 43 ft. high.[1] On the marble slab above the centre of the three *kiblas*, or prayer-niches, are these words in Arabic: "This high and far-stretching mosque was raised by the slave who trusts in the mercy of God, the compassionate, the alone-to-be-worshipped" The Koran says: "Truly mosques belong to God, worship no one else with Him" "The slave who trusts in God, the Aider, Nasir-ud-dunya, wa-ud-din Abu'l Fath Ahmad Shah, son of Muhammad Shah, son of Sultan Muzaffar."

Through the E gate is the **Tomb of Ahmad Shah** (14) (repaired 1587) He was the first King of Gujarat This domed building has a portico to the S. with eighteen pillars. The windows are of perforated stonework. The central chamber is 36 ft. square. It is paved with marble of different colours. The centre cenotaph is that of Ahmad Shah, the one to the W. is that of his son, Muhammad Shah, and that on the E is that of his grandson, Kutb Shah, died, respectively, 1441, 1451, and 1459 A.D

50 yds. to the E., across the street, are the **Tombs of the Queens of Ahmad Shah** (14), Rani Ka Hujra The houses quite shut out the façade of the mausoleum, which is raised on a platform In the façade are thirteen highly ornamented carved recesses Inside is a rectangular court, with a corridor running round it. In the centre are eight large cenotaphs and several small ones The centre tombstone is finely carved, and is the tomb of Mughlai Bibi. It is of black stone or marble, inlaid with white This building is much out of repair.

Rani Sipri's Mosque and **Tomb** (18) are almost the most beautiful monuments in Ahmadabad. Rani Asni, by whom the mosque and tomb were really built, was one of the wives of Mahmud Bigara, and they were completed in 1514. "They are the first of a series of buildings more delicately ornate than any that preceded" [1] The mosque has two minarets, about 50 ft high, having four compartments tapering up to the top. The roof is supported by a row of six coupled pillars with single ones behind The rauza, or tomb, is 36 ft square, with screens and no arches

Dastur Khan's Mosque (17), built in 1486 by one of Mahmud Bigara's Ministers The open stone screenwork that shuts in the cloister round the courtyard is very fine In the gateway the marks of shot may be seen A few yards to the E. of Dastur Khan's Mosque is *Asa Bhil's Mound*, the site of the fort of the Bhil Chief, from whom an earlier town of Asaval had its name

A little to the N.E of the Jamalpur Gate is **Haibat Khan's Mosque** (19), adapting Hindu elements. Haibat Khan was one of the noblemen of Ahmad Shah's court The mosque is very plain. The front wall is pierced by three small pointed arches some distance apart The minarets are small and without ornament, and rise like chimneys from the roof. The central dome, of Hindu workmanship and of great beauty, is barely raised above the others. The pillars, taken from different temples, display every variety of rich

[1] In 1781 James Forbes, in his *Oriental Memoirs*, said of them "A circular flight of steps led to a gallery near the top of each. A little force at the arch of the upper gallery made both minarets shake, though the roof of the mosque remained unmoved"

[1] Sir T Hope's *Ahmadabad*.

ornament. Except for the form of its dome, the outer porch would suit a Hindu temple.

The **Tin Darwaza,** or **Three Gateways** (11), built by Sultan Ahmad I., is of stone richly carved It crosses the main street a little to the N. of the Jami Masjid This gateway led into the outer court of the Bhadar, known as the Royal Square, and was surrounded in 1638 by two rows of palm trees and tamarinds (J A de Mandelslo's *Voyages*, 1669, p 76) Facing the Bhadar Gate is a municipal garden To the W is the Hemabhai Institute, with a good library and newspapers and periodicals. W. of this Institute—reached by leaving the main road—is the Government Telegraph Office. Near it is the **Mosque of Malik Sha'ban**, with an inscription which records that it was built in the reign of Qutb-ud-din of Gujarac, by Sha'ban, son of 'Imad-ul-mulk, in 856 A H = 1452 A.D

The **Bhadar** (10), an ancient enclosure or citadel, built by Ahmad Shah, 1411, and named after the goddess Bhadra, a propitious form of Kali, is occupied by public offices In the E face is the **Palace**, built by **'Azam Khan** (13), the 23rd Viceroy (1635-42), who was called *Udai*, " the white ant," from his love of building It is now the Post-Office. S of the palace are the Civil Court buildings Over the gate is a Persian chronogram giving the date 1636 A D The *N. entrance to the Bhadar*, under an archway 18 ft high, opens into a regular octagonal hall of great elegance, containing in the upper storey an arched gallery, having in front a low wall of open-cut stone, and each gallery surmounted by a cupola. Underneath this hall is a fine vaulted chamber, entered by a flight of steps at each side, with a reservoir and fountain in the middle. Close to the Jail is a temple to Bhadra Kali Muta

At the N.E. corner **Sidi Saiyad's Mosque** (9) forms part of the wall. He was a slave of Ahmad Shah I. Two of its windows are filled with delicate stone tracery of tree-stems and branches beautifully wrought. Fergusson, who gives an illustration of one of the windows, says in his *Indian Architecture*, 2, 236-37 " It would be difficult to excel the skill with which the vegetable forms are conventionalised just to the extent required for the purpose. The equal spacing also of the subject by the three ordinary trees and four palms takes it out of the category of direct imitation of nature, and renders it sufficiently structural for its situation, but perhaps the greatest skill is shown in the even manner in which the pattern is spread over the whole surface. There are some exquisite specimens of tracery in precious marbles at Agra and Delhi, but none quite equal to this."

In the S.W corner of the Bhadar is **Ahmad Shah's Mosque** (15), built by him in 1414, being perhaps the oldest here It is said to have been used as the King's private chapel The façade is almost bare of ornament. The two minarets are evidently unfinished The *mimbar*, or pulpit, is adorned with what look like laurel leaves The architecture shows the first attempts at building a Muslim edifice in what had been a Hindu city. The pillars still bear Hindu figures and emblems The N porch, leading into the latticed ladies' gallery, is Hindu throughout, and may be part of a temple *in situ* To the left, on advancing towards the mosque, formerly stood the Ganj-i-Shahid, or Stone of Martyrs, where the Muslims killed in the storming of the town were buried.

W. of this mosque is the **Manik Burj** (16), or **Ruby Bastion**, built round the foundation-stone of the city. There is a small round tomb in the yard near the Collector's office, which is said to be that of Ibrahim Kuli Khan, a Persian warrior.

Shah Wajih-ud-din's Tomb (8), built by Saiyad Murtaza Khan Bokhari, 11th Viceroy, 1606-1609, is a very beautiful monument.

Saiyad Alam's Mosque (5), was built about 1420 by Abubakr Husaini. The inner details are as rich as Hindu art could make them

The **Mosque, Tomb, and College of Shuja'at Khan**, Deputy Viceroy The Mosque stands 400 yds N.E. of the Lal Gate of the Bhadar, has two slender minarets, and is divided by piers into five bays Over the kibla are written the creed and date = 1695 The walls, up to 6 ft, are lined with marble The tomb is of brick, with a marble floor, much damaged It is called both the Marble and the Ivory Mosque

The **Rani Masjid (Queen's Mosque)** (3) *in Mirzapur* a few yds to the S. of the D.B (now the "Grand Hotel"), built probably in Sultan Ahmad I.'s reign There are two minarets, unfinished or partly destroyed by an earthquake (1819), now only 33 ft high The roof has three domes, and is supported by thirty-six pillars, the taller of which raise the domes to provide light without glare.

N.E of the mosque is the **rauza or tomb** (restored). Under the dome are two cenotaphs of white marble; the central one is the tomb of Rupvati (1430-40), a Princess of Dhar. It is in good preservation, while that on the W. side is much injured, both are ornamented with the chain and censer, a Hindu device. Fergusson (*Ind. Arch.*, 2, 236) has given a plan of this mosque, and says: "The lower part of the minaret is of pure Hindu architecture. We can follow the progress of the development of this form from the first rude attempt in the Jami Masjid through all its stages to the exquisite patterns of the Queen's Mosque at Mirzapur."

The Mosque of Shaikh Hasan Muhammad Chishti, *in Shahpur* (1), is in the N.W angle of the city, not far from the Sabarmati, 1565 A.D The minarets are unfinished "The tracery in the niches of their bases is perhaps superior to any other in the city" On the S or left side of the central arch is a Persian quatrain. This chronogram gives the date 1566 A D

East of the Rani's Masjid is the **Mosque of Muhafiz Khan** (4), built in 1465 by Jamal-ud-din Muhafiz Khan, Governor of the city in 1471 under Mahmud Bigara According to Sir T. Hope, "its details are exquisite," and the minarets of the mosque and those of Rani Sipri "surpass those of Cairo in beauty"

S E of this mosque is the modern **Swami Narayan's Temple** (6), finished in 1850 It has an octagonal dome, supported on twelve pillars, and is a fine building

Close to it is the **Pinjrapol**, or *Asylum for Animals* The enclosure is surrounded by sheds, where many animals are lodged. There is also a room where insects are fed on human blood, given by volunteers. Close to the S. are nine tombs, each 18 ft 3 in. long, called the **Nau Gaz Pir**, "the Nine Yard Saints." They are probably the tombs of men killed in some battle.

Ahmadabad is celebrated for its Handicraftsmen—goldsmiths, jewellers, etc., who carry the *chopped* form of jewellery (the finest archaic jewellery in India) to the highest perfection; copper and brass-workers, as instanced particularly in the very graceful and delicate brass-screens and *pandans* (betel-boxes); carpenters, who have long been famous for their superior carving in *shisham*, or mongrel blackwood, of which the finest specimens are to be found here; stone-masons, lacquer-workers, carvers in ivory—also for the manufacture of "Bombay boxes", mock ornaments for idols; leather shields, cotton cloth; calico-printing, gold-figured silks (mentioned by Fryer in 1674), and gold and silver tissues, kimkhwab (*kinkab*), or brocades the noblest produced in India, gold and silver lace and thread, and all manner of tinsel ornaments

Its industrial importance is shown by the fact that "the *Nagar-Seth*," or city lord, of Ahmadabad is the titular head of all the Guilds, and one of the highest personages in the city

The carpet manufactories as well as the workshops of the other crafts are well worth a visit

ENVIRONS.—For 12 m. round Ahmadabad the country is full of interesting ruins, but only the principal can be mentioned. Just outside the Delhi Gate, on the N., is the **Hathi Singh Temple**, built (1848) of white marble surmounted by fifty-three domes and pointed Sikaras. The dimensions are of the first order, its style pure Jain. In its sculptures may be seen representations of the twenty-four holy men, or Tirthankars, and hundreds of other images, all similar, but each labelled on the base with the emblem of some distinct Jain. The entrance is from a courtyard surrounded by a corridor, where woollen slippers are provided before ascending a portico richly carved and supported by pillars between two towers. The inner porch has two storeys and a special form of roof. The temple consists of an outer and an inner chamber, both paved with coloured marbles, chiefly from Makrana, in Rajputana. In the interior is the image of Dharmnath, represented as a beautiful youth, with a sparkling tiara of imitation diamonds

N.W. is the ruined Tomb of **Darya Khan**, 1453, Chief Minister of Mahmud Bigara. The dome is 9 ft. thick, and the largest in Gujarat. Near this is a hostel, for students of the R.C. High School, built by the late Sirdar Sir Chinubhai M. Ranchhodlal

Near by is the **Chhota** (small) **Shahi Bagh**, a private house, occupied by the District Superintendent of Police, where it is said the ladies of the royal harem lived. Across the railway line is the **Shahi Bagh**, a very fine garden-house, now the residence of the Commissioner of the Northern Division. A subterranean passage is said to communicate between the two places. The building was erected in 1622 by Shah Jahan, when Viceroy of Ahmadabad, to give work to the poor during a season of scarcity. In the 17th century this was the great resort for the people of the city. The Shahi Bagh is close to the railway bridge over the Sabarmati

¼ m. S.W. of the Shahi Bagh is **Miyan Khan Chishi's Mosque**, built in 1465 by Malik Maksud Wazir; and ¼ m. more to the S.W. is **Achyut Bibi's Mosque**, built in 1469 by 'Imadu'l Mulk, one of Mahmud Bigara's ministers, for his wife Bibi Achyut Kuki, whose tomb is close by. There were seven minarets here, all of which were thrown down in the earthquake of 1819.

At **Asarva**, about ¼ m. N.E. of the Daryapur Gate, and close to the Asarva railway station, are the **Baolia**, or **Wells of Dada Hari** and **Mata Bhawani**. The real name of Dada (1435) is said locally to have been Halim, "mild," but he was called Dada Hari because he was the husband of the Dai, or nurse of one of the Kings A domed portico, supported by twelve pillars, gives entrance to three tiers of finely constructed galleries below ground, which lead to the octagonal well, with inscriptions in Sanskrit and Arabic. A second well has pillars round it and a fence wall Beyond this is a circular well for irrigation A very narrow staircase leads to the level ground, where by the side of the well are two stone kiosks. About 50 yds to the W is *Dada Hari's Mosque*, one of the best decorated buildings at Ahmadabad, though no marble is employed The stone is of a dull reddish-grey colour The bases of the two minarets are richly carved, the tops were thrown down by the earthquake of 1819. To the N. is the *Rauza of Dada Hari*, or *Halim* The N door is exquisitely carved, but the inside is quite plain

Mata Bhawani.—This well is about 100 yds. N. of Dada Hari's, but is much older, and perhaps of the time of Karan Solanki (1063-93), a Chalukhyan ruler when Ahmadabad was called Karanavati. The descent to the water from the platform is by fifty-two steps and pillared galleries, as at Dada Hari.

Most of the houses in the *Madhavpura* suburb are warehouses, and it is the great business quarter. *Saraspur*, E of the railway station, is a distinct walled town, the largest of the suburbs In this suburb is the Jain **Temple of Chintaman**, built 1638, restored 1868 by Shantidas, a rich merchant. Aurangzeb, while Viceroy, changed it into a mosque. The Jains petitioned the Emperor Shah Jahan, who ordered his son to restore the temple, but in 1666 Thevenot speaks of it as still a mosque

¾ m. S.E of the Rajpur Gate is the Hauz-i-Qutb, generally called the **Kankariya Lake**, or Pebble Lake This is a polygon of thirty-four sides, each side 190 ft long, the whole being more than 1 m. round The area is 72 acres It was constructed by Sultan Qutb-ud-din in 1451, and was then surrounded by many tiers of cut-stone steps, with six sloping approaches, flanked by cupolas and an exquisitely carved water-sluice. In the centre was an island, with a garden called Nagina, or the Gem, and a pavilion called Ghattamandal. In 1872 Mr Borrodaile, the Collector, repaired the building, and made a road from the Rajpur Gate On the E bank of the lake are some Dutch and Armenian tombs, Saracenic in style, with domes and pillars a good deal ruined The dates range from 1641 to 1689.

The expedition may be continued to **Batwa**, which is almost 5 m due S of the Rajpur Gate. Here Burhan-ud-din Qutb-ul-Alam, the grandson of a famous saint buried at Uch on the Sutlej, is interred. He came to the court of Sultan Ahmad I., settled at Batwa, and died there in 1452 The mausoleum, built by Sultan Mahmud Bigara, resembles the buildings at Sarkhej, but the aisles are arched and vaulted, and the dome is raised by a second tier of arches Much has fallen, the pillars not resisting the thrust Adjoining it are a mosque and tank. In this tomb there is a small log, which (it is said) one night struck the saint's foot. On his calling out and asking whether it was a piece of iron, stone, or

wood, the log at once began to contain all these materials Many have tried to discover its real substance.

The tomb of **Shah Alam**, the son of the saint buried at **Batwa**, is 2 m S.E. of the city on the Batwa road. Before reaching the tomb the road passes under two plain gateways, and then through one with a Nakkar Khana (music gallery) above the archway, and so into a vast court. To the W is the mosque. The Rauza is to the E, and is protected by metal lattices, he was a spiritual guide of Mahmud Bigara, and died in 1475. To the S is an assembly hall, built by Muzaffar III. (1561-72), and partly destroyed by the British under General Goddard in 1780 to furnish materials for the siege.

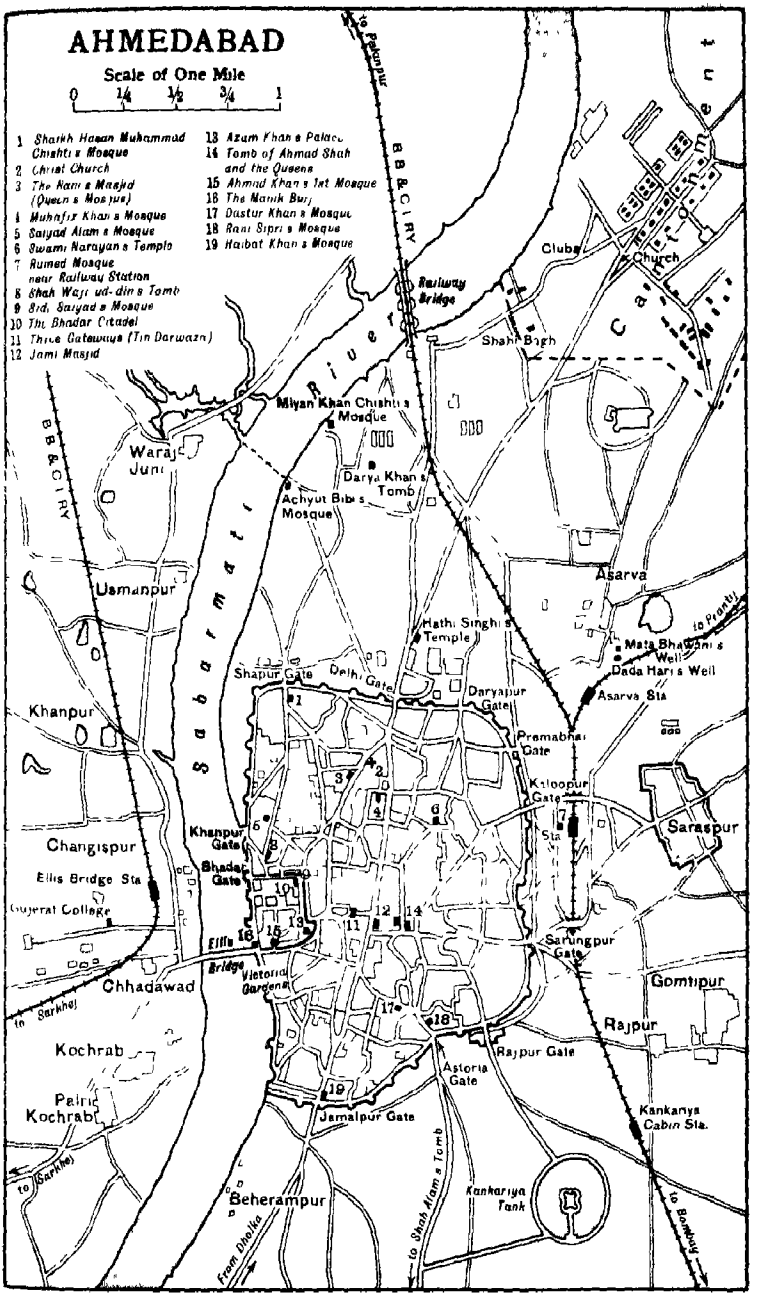
The tomb is attributed to Taj Khan Nariali, one of Mahmud's courtiers. Early in the 17th century Asaf Khan (p 368), brother of the Empress Nur Jahan, adorned the dome with gold and precious stones, now gone The floor is inlaid with black and white marble, the doors are of open brasswork, and the frame in which they are set, as well as the space between the door-frame and the two stone pillars to the right and left, are of pure white marble, beautifully carved and pierced. The tomb itself is enclosed by an inner wall of pierced stone. The outer wall in the N is of stone trellis-work of the most varied design, and here Shaikh Kabir, renowned for his learning, who died in 1618, is buried

The mosque, built by Muhammad Salih Badakhshi, has three large and 18 small domes The minarets of seven storeys, handsomely carved and about 90 ft. high, were much damaged by the earthquake of 1819, but have been repaired. To the S of the mosque is a tomb like that of the chief mausoleum, where the family of Shah Alam are buried. Outside the wall to the W. is a reservoir built by the wife of Taj Khan Nariali, now known as Chandola tank, which has been greatly improved by the Public Works Department

Sarkhej is 6 m S W on the railway line to Dholka (p. 206). The road crosses the Sabarmati river (the channel of which is about ¼ m. broad, but the water in the dry weather is only 2 ft. deep) on a massive iron bridge of fourteen spans, called the Ellis Bridge. On the left bank is the Victoria Garden, of which the site was given by Government to the city, with a marble seated statue of Queen Victoria by Mr G A Mhatre. The river-bed is dotted with enclosures for the cultivation of melons, potatoes, and other vegetables, and the running water is lined with gaily dressed women washing their clothes. The remains of an old bridge will be seen to the S. of the Ellis Bridge, both the road and the old railway bridges were carried away by a great flood in 1875 Near the bridge the city wall is from 40 ft to 60 ft high. Near the W end of the bridge is the Gujarat College Close by, is the fine building of the Science Institute, built by the late Sirdar Sir C M Ranchhodlal

At 2¾ m. is the massive brick **Mausoleum of 'Azam and Mu'azzam**, built probably in 1457 These brothers are said to have been the architects of Sarkhej, and to have come from Khorasan The immense structure which contains their tombs is raised on a platform.

Just before reaching Sarkhej there are two brick towers about 30 ft high, the bases of which, close to the ground, have been so dug away that it seems a miracle they do not fall


AHMEDABAD
Scale of One Mile
0 1/4 1/2 3/4 1
1 Shaikh Hasan Muhammad Chishti's Mosque
2 Christ Church
3 The Nami's Masjid (Queen's Mosque)
4 Muhafiz Khan's Mosque
5 Saiyad Alam's Mosque
6 Swami Narayan's Temple
7 Rumee Mosque near Railway Station
8 Shah Wajh ud-din's Tomb
9 Sidi Saiyad's Mosque
10 The Bhadar Citadel
11 Three Gateways (Tin Darwazas)
12 Jami Masjid
13 Azam Khan's Palace
14 Tomb of Ahmad Shah and the Queens
15 Ahmad Khan's 1st Mosque
16 The Manik Burj
17 Dastur Khan's Mosque
18 Rani Sipri's Mosque
19 Haibat Khan's Mosque
to Palanpur
B B & C I RY
Railway Bridge
Clubs
Church
Shahi Bagh
Sabarmati River
Cantonment
Miyan Khan Chishti's Mosque
Waraj Junc
Darya Khan's Tomb
Achyut Bibi's Mosque
Usmanpur
Asarva
Hathi Singh's Temple
to Prantij
Mata Bhawani's Well
Dada Hari's Well
Shahpur Gate
Delhi Gate
Daryapur Gate
Asarva Sta
Khanpur
Premabhai Gate
Kalupur Gate
Sta
Sarangpur
Khanpur Gate
Bhadar Gate
Changispur
Ellis Bridge Sta
Gujerat College
Ellis Bridge
Victoria Gardens
Chhadawad
to Sarkhej
Kochrab
Patni Kochrab
Astoria Gate
Rajpur Gate
Rajpur
Gomtipur
Jamalpur Gate
Kankariya Cabin Sta.
to Sarkhej
Beherampur
from Dholka
to Shah Alam's Tomb
Kankariya Tank
to Bombay

Then the road passes under two arches, leading into the courtyard of Sarkhej. To the left on entering is the fine mausoleum of **Mahmud Bigara**[1] and his sons, and connected with it by a beautiful portico another equally magnificent tomb on the border of the tank for his Queen Rājabai. To the right is the **Tomb of the Saint** *Shaikh Ahmad Khatri Ganj Bakhsh*, called also Maghrabi Ganj Bakhsh lived at Anhilwara, and was the spiritual guide of Sultan Ahmad I, and a renowned Muslim saint, he retired to Sarkhej, and died there in 1445 at the age of 111. The tomb has a great central dome and many smaller ones Over the central door of the tomb is a Persian quatrain It gives the date 1473 A.D. The shrine inside is octagonal, surrounded by finely-worked brass lattice-screens. The pavement is of coloured marbles, and the dome inside richly gilt, from it hangs a long silver chain, which once reached to the ground. The vast adjoining **Mosque** is the perfection of elegant simplicity, it has ten cupolas, supported on eighteen rows of pillars. The whole of these buildings, says Fergusson (*Ind. Arch*, 2, 235), "are constructed without a single arch, all the pillars have the usual bracket capitals of the Hindus, and all the domes are on the horizontal principle." S of the saint's tomb is that of his disciple Shaikh Salah-ud-din

Mahmud Bigara excavated the great tank of 17½ acres, surrounded it by flights of stone steps, constructed a richly-decorated supply-sluice, and built at its S.W corner a splendid palace and harem, which have been repaired by the Archæological Department.

The Sarkhej buildings have the special interest of being almost purely Hindu, with only the faintest trace of the Saracenic style. Numbers of people formerly bathed, in spite of the crocodiles, in the old tank, which is now dry. A little S. of the lake is the tomb of Baba Ali Sher, a saint even more venerated than Ganj Bakhsh. Close by are the remains of Mirza Khan Khanan's Garden of Victory, laid out in 1584 after his defeat of Muzaffar III, the last Ahmadabad King. Sarkhej was so famous for indigo that in 1620 the Dutch established a factory there None is grown now.

8 m N of Ahmadabad is the beautiful and celebrated *wao vasli* (p 195), or well of **Adalaj**. There is a model of it in the Bodleian Library at Oxford

From Ahmadabad main station a line branches off to the N.E. to Khed-Brahma through Parantij (41 m) and Himatnagar (55 m.), the capital of Idar State, conquered by sons of Abhi Singh (Subadar of Gujarat, 1731). The famous Sir Pertab Singh, who was three times Regent of Jodhpur (p. 211), was Maharaja of Idar from 1901 to 1911, when he abdicated H.H Maharaja Himmat Singh (born 1899) succeeded in April 1931

Leaving Ahmadabad, the railway crosses the Sabarmati River quite close to the Shahi Bagh on a bridge, 1377 ft long, which carries the rails for both gauges and a footway

From Ahmadabad to Delhi by the B.B and C I Ry metre-gauge line.

This railway was constructed between Delhi, Agra and Ahmadabad by the State from both ends, meeting in 1881.

[1] Reigned 1459-1511 A.D. Bigara means with horn like moustaches

At 310 m. **Sabarmati** junction the M.G. runs to Delhi, whilst the broad-gauge (1871) turns W for Viramgam and Kathiawar (Route 11). There is also a branch line to the S.W. passing Sarkhej (above) to Dholka (39 m) and Dhanduka (77 m) junction for Botad. The Dholka mosques are beautiful.

322 m. **Kalol** junction branches 30 m. N.E. to Vijapur, and 17 m. N.W. to Bhoyani Rd.

349 m. **Mehsana** junction. This is the junction for three branch lines constructed by the Gaekwar of Baroda. They are (1) a line passing through Kheralu to Taranga Hill, 35 m. N.E.; (2) a line through **Patan**, the historic capital of Gujarat, to Kakosi Metrana Rd., 50 m. N.W.; (3) a chord line to **Viramgam** (p. 227), 41 m. S.W., which connects the Rajputana and Kathiawar metre-gauge systems.

On these branch lines two places only need be noticed.

Vadnagar, 21 m. N.E. on the line to Taranga Hill. This place, the site of Anandpura, is stated to have been conquered by a Rajput Prince from Ajodhya (p. 422) in A.D. 145. There are some interesting ruins, including a very fine Kirti Stambha gateway, and the *Temple of Hatkeswar Mahadeo* is worth a visit. It is now the religious capital of the Nagar Brahmans, a most influential class of men in Gujarat and Kathiawar. In former years it was the chartered refuge of a class of robbers known as Dhinoj Brahmans.

Patan, 25 m. N.W. of Mehsana on the site of the ancient **Anhilwara**, capital (A.D. 746) of the Hindu Kings of Gujarat, which was taken by Mahmud of Ghazni on his way to attack the temple of Somnath in 1024. It was taken again by Almas Beg or Alaf Khan, brother of Ala-ud-din Khilji, in 1306. The site has been a quarry, but it is still famous for its *libraries of Jain MSS., and there* are 108 Jain temples.

On the main line is,

362 m. **Unjha** station. A town in the Baroda State, and the headquarters of the Kadwakanbis, a peculiar caste of agriculturists. Marriages among them take place but once in eleven years, when every girl over forty days old must be married on one or other of the days fixed. Should no husband be found, a proxy bridegroom is sometimes set up and married to a number of girls, who immediately enter a state of nominal widowhood until an eligible suitor presents himself, when a second marriage takes place.

370 m. **Sidhpur** station, on the Sarasvati river. The place dates back to A.D. 950, and contains the ruins of *Rudra Mahaya Temple*. It was wrecked by Ala-ud-din Khilji in 1297. The stones are gigantic and the carving superb, but very little of it remains. A row of small temples has been converted into a mosque. Modern temples are very numerous. Mehsana, the N. division of the Baroda State, in which Sidhpur is situated, is the only part of Western India in which poppies are allowed to be grown. The opium is manufactured in Sidhpur at the State Stores.

389 m. **Palanpur** junction (R., D.B.). The chief town of a Muslim State in the Rajputana Agency (1946). The Palanpur State covers

an area of 1766 sq. m. The present Nawab, Lt.-Col. H.H. Sir Tale Muhammad Khan Sher Muhammad Khan, K.C.I.E., K.C.V.O., was born in 1883 and succeeded in 1918. He is entitled to a permanent salute of 13 guns. Ry. 17 m. N W. to Deesa on the river Banas (opened 1893): formerly a British military Cantonment, but since 1928 included in the Palanpur State.

425 m **Abu Road** station (R., D.B.) A railway colony Mount Abu looks down on it from the N W

The excursion to Mount Abu is one of the most interesting in India on account of the Jain temples The ascent to it, 17 m., is by bus or motor. Cars (Rs 7 a seat) ordered beforehand by telegram (Mervanj Rustomji, Mt Abu). Rooms should be secured at the Rajputana Hotel, or the Govt. D.B. (4 rooms). (Apply for the latter to the Asst Engr P.W D) Though of the same formation as the Aravalli range, which runs up to Delhi, Abu is detached by a valley about 15 m wide The plateau at the top is about 14 m. by 4 m., and varies in height from 3500 ft. to 5600 ft

Mount Abu * (3822 ft. above the sea) is H.Q. of the Resident, so called (since 1843) in Rajputana. The hill is actually within the territory of the Maharao of Sirohi, H.H. Sir Sarup Ram Singh Bahadur, G.C.I.E., K.C.S.I., a Chauhan Rajput of the Deora sub-clan (born 1888, succeeded 1920), and is held by the British Govt. on a permanent lease The killing of cows is strictly prohibited, as elsewhere in Rajputana, and no beef can be obtained, nor must it be imported in any form. The climate is apt to be cold in winter.

At Mount Abu are the Residency, *Church*, *Lawrence School* for the children of soldiers, and many private houses on the margin of the *Nakki Talao*—a most charming piece of artificial water studded with islands, and overhung by a curious rock that looks like a gigantic toad about to spring into the water Several Rajputana Princes have palaces here, and the Western States Resident comes from Baroda for the hot weather. Lady Honoria (d. 1851), wife of Sir Henry Lawrence, is buried in the cemetery The surface of Mount Abu is very uneven, with few motor roads, the wheel-base of cars being restricted. Rickshaws are used The views over the plains from various points, such as the Crags, are exceedingly fine. The most accessible is called *Sunset Point*, S.W of the lake. There is a sporting little golf-course, but polo is no longer played An attack was made on the place on 21st August 1857 by mutineers from the Erinpura force but was beaten off.

The **Dilwara Temples**, the great attraction of Mount Abu,[1] are reached by a good road (1½ m.) *A pass to visit them must be obtained from the District Magistrate, Mt. Abu; open noon to 6* P.M

The temples are very beautiful, containing the finest marble-carving in India: they find a fitting framework in their nest of mango-trees, with hills surrounding them on all sides

[1] See *Guide-book to Dilwara Temples and other Antiquities of Mt Abu*, by the late Col C E. Luard, 1913, and *Mount Abu*, by H. D. Nanavati, 1919

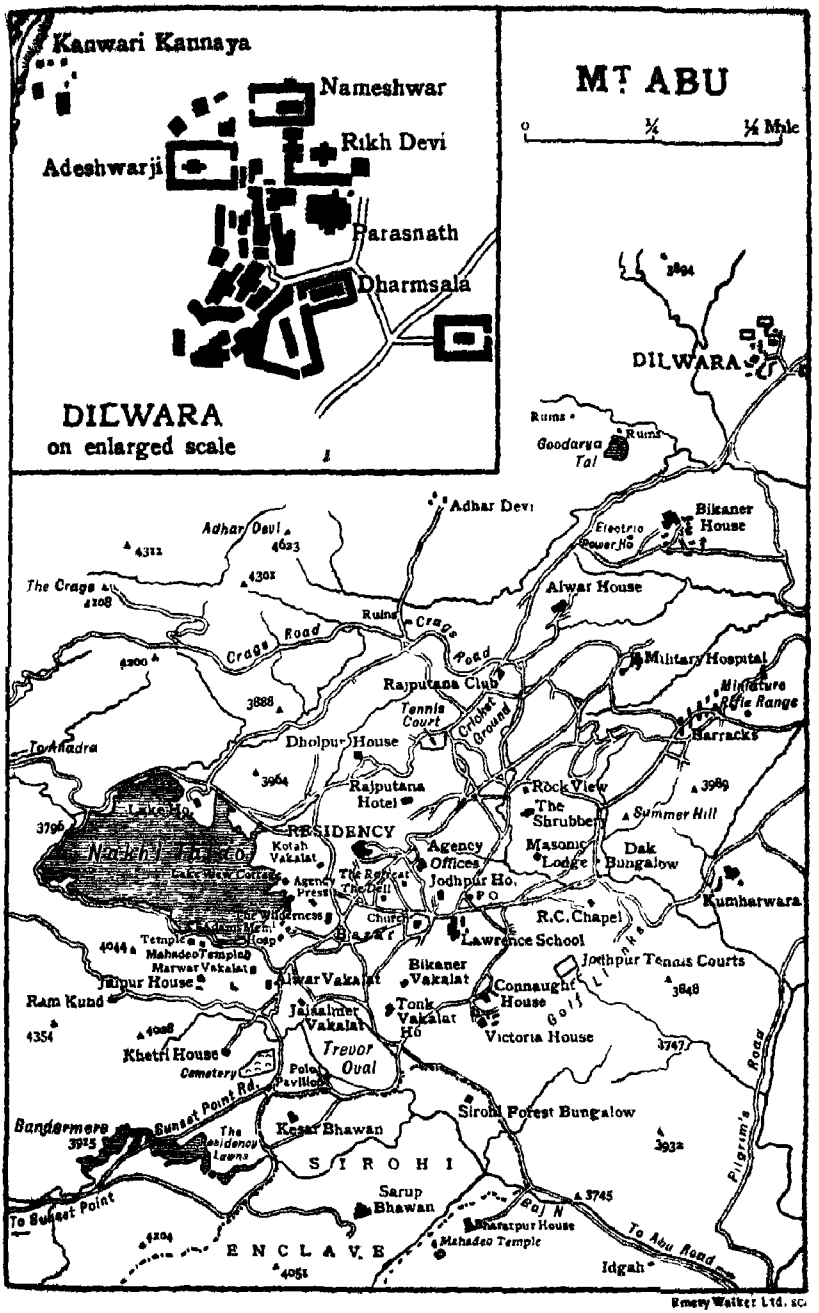
"The more modern of the two temples is usually ascribed to the same brothers, Tejapala and Vastupala, whose names are associated with the triple temple at Girnar; the inscriptions, however, ascribe the erection and endowment to Tejapala alone This was consecrated in 1230 A.D., and for minute delicacy of carving and beauty of detail stands almost unrivalled" (Note the multiple lotus pendentive in the mandapam.) It is dedicated to Neminath, the 22nd Tirthankar

"The other, built by Vimala, a Minister or governor under Bhimadeva in the year 1031 A.D., is simpler and bolder, though still as elaborate as good taste would allow in any purely architectural object. Being one of the oldest as well as one of the most complete examples known of a Jain temple" It is interesting to speculate how Muslims would have converted a Jain temple into a mosque, as at Ajmer or Delhi

"The principal object here, as elsewhere, is a cell lighted only from the door, containing a cross-legged seated figure of the Jina to whom the temple is dedicated —in this instance Rishabhanath, or Adinath. The cell terminates upwards in a sikhara, or pyramidal roof, which in these Abu temples, however, are too low to be properly designated spires. To this, as in almost all instances, is attached a mandapam, or closed hall, and in front of this a portico, in this instance composed of forty-eight free-standing pillars; and the whole is enclosed in an oblong courtyard, 128 ft. by 75 ft inside, surrounded by a double colonnade of smaller pillars, forming porticoes to a range of cells, as usual fifty-two in number, with some extra chapels at the S.W. corner; these enclose it on all sides exactly as they do in Buddhist viharas. In this case, however, each cell, instead of being the residence of a monk, is occupied by one of those cross-legged images of Jinas which belong alike to Buddhism and Jainism. In other religions there may be a great number of separate chapels attached to one building, but in no other would fifty-two be found, as in this example, each containing an image of a Tirthankar, and all so nearly identical as to be almost undistinguishable. With the Jains it seems to be thought the most important point that the Jinas, or saints, are honoured by the number of their images, and that each principal image should be provided with a separate abode. The long beams, stretching from pillar to pillar, supporting the dome, are relieved by curious angular struts of white marble, which, springing from the lower capital, seem to support the middle of the beam" (Fergusson).

Achalgarh is reached by following the road (suitable for small cars) past Dilwara for about 4 m. to the village of Uria, where there is a bungalow Application should be made to the District Magistrate at Mount Abu; no supplies and no Khansama. From this a road turns right 1 m to the first temple of Achalesvar Mahadeva (1412 A D).

S E. are other temples containing the toe of Siva and a brass Nandi (one Jain, 1513) overlooking the valley. The view is magnificent. These buildings can be seen on the right during the ascent from Abu Road S of the first temple is a tank, Manda Kini Kund (*c.* 900 A D). On the bank is an image of Adi Pal, the Pramara King, with his bow, and near him three large stone buffaloes pierced with arrows The legend is that this tank was once filled with *ghi*, and these buffaloes came every night to drink it up—till they were all shot This figure



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is superior in style and treatment to most; and the same may be said of the statues in other temples around the Hill. The Achalgarh group is perhaps as attractive as the more renowned temples at Dilwara, though not comparable in size or finish

Around Mount Abu in the plain and on the hillside are other temples, all charmingly situated, but a visit to these should not be attempted without a guide or person who knows the country intimately

Guru Sikhar (5646 ft.) is the highest point of Abu. A night should be spent at the Dak Bungalow at Una, near Achilgarh (food and rugs must be brought), and the ascent made in the early morning, with a local guide. A small Siva shrine marks the summit

Gaumukh Temple, 500 ft. down the S.E. slope and 3 m. from the church, is reached by a path behind the High School buildings, along the main road to the plains. There is a brass figure (facing the temple). Images of Rama and Krishna are on either side of the sage Vasishta, who in Vedic anthology was their tutor. This place is famous for the *Agni Kund*, in which the five tribes of the Rajputs claim to have been created by the gods, in order to counteract the arrogance and tyranny of the Kshatryas. (Tod wrongly located this *Agni Kund* at Achalgarh.)

Gautama lies on the S. side of the hill, W. of Gaumukh, 5 m. from Mount Abu. Lovely view

Rishi Krishna, at the foot of the hill, S.E. side, 14 m. from the Civil Station, is easily visited from Abu Road

472 m. from Bombay is **Erinpura Road** for the abandoned Cantonment of Erinpura, lying 6 m. W. (so called by Captain Irving after the land of his birth). The Marwar legion, raised in 1835, mutinied on 23rd August 1857, but spared its officers. Two weeks later it defeated the troops of the Jodhpur State sent against them, and finally started for Delhi. It was intercepted on 16th October at Narnaul (p. 226), and defeated.

483 m. **Falna** Stn. 25 m. E. is the marble Jain temple of Sadri (really at Ranapur or Rampura, 5 m. S. of Sadri), built by Kumbha, a Rana of Udaipur, in 1440, in a ravine running into the western slope of the hills below Kumbha's favourite fort of Kumalmer. "It is still nearly perfect and is probably the most complicated and extensive Jain temple in India, and the most complete for the ritual of the sect." It can be visited only by riding. It is not open to the public, but if previous intimation is received, the local magistrate (hakim) of the Jodhpur Govt. stationed at Bali can arrange admission.

524 m. from Bombay is **Marwar** junction for Jodhpur, and for a line running E. to Phulad, connecting with the Udaipur railway (*p.* 156). A *tongue of the Ajmer* territory separates the two States.

Marwar Junction to Hyderabad (Sind) and Karachi

From Marwar Jn. the Jodhpur Railway branches N.W. (opened 1884) to (44 m.) **Luni** junction, from which it continues 309 m., through a desolate country to Hyderabad (Sind). The Luni river is crossed by a bridge, 1295 ft. long. Balotra (50 m.) is the jn. for the salt-works at *Pachbadra* (10 m.). This is the route (opened

1900) taken by the B.B. and C.I. Ry. Sind Mail, which runs from Ahmadabad on the metre-gauge *viâ* Marwar Jn. and Luni to Hyderabad and to Karachi, with transhipment at Hyderabad to the broad-gauge N.W. Ry line. A refreshment car is attached to the mail trains on this line, which forms the shortest railway route between Bombay and Karachi (steamers take 38 hours). For Sind see Route 19.

110 m. from Luni junction is **Barmer** station for **Jaisalmer** (98 m.), capital of the Bhati Rajputs of the western desert, founded by Jaisal, ancestor of the Maharaja of Patiala, in A.D. 1156; alt 874 ft. It is famous for buildings constructed of yellow-brown stone, for its handsome Jain temples and the Fort. The desert track from Barmer, though very bad, is practicable for motors, and arrangements can be made (with difficulty) by the State authorities (Guest House for State visitors: no D.B.). The area of the State is 16,062 sq. m.

The present Maharawal of Jaisalmir, H.H. Sir Jawahir Singh Bahadur, K.C.S.I., was born in 1882 and succeeded in 1914.

Marwar Junction to Jodhpur and Merta Road.

The railway, opened 1885, runs 20 m. N. from Luni Jn. to Jodhpur, many miles before reaching which the fort can be distinguished rising out of the bare plain.

64 m. from Marwar junction is **JODHPUR** (alt 771 ft.), capital of a Rajput State, and of the country known as Marwar; it is the residence of H.H. the Maharaja of Jodhpur and of a Resident. Permission can be had from the Chief Minister to see the fort. There is a first-class hotel. The aerodrome is regularly used by Air Lines to the East. Branch line, 81 m. N. to Phalodi.

The *State of Jodhpur*, or *Marwar*, the "Land of Death," covers 35,000 sq. m., and was founded from Kanauj, after the defeat of the Rathors there in 1211. The *city* was built by Rao Jodha in 1459 (he died 1489) as a new seat of his government. The wall was built by Maldeo (1532-73).

From Rao Jodha are descended, not only the present ruling family of Marwar, but the princes of Bikaner, Kishangarh, Idar, Ratlam, Jhabua, Sailana, and Sitamau. (The last four States are in the Central India Agency.) Rao Udai Singh (d. 1581) received the title of Raja from Akbar, and his son, Sawai Raja Sur Singh (d. 1595), conquered Gujarat and part of the Deccan for Akbar. Maharaja Jaswant Singh (d. 1678) commanded the armies of Shah Jahan and Dara Shikoh against the forces of Princes Aurangzeb and Murad in 1658, and died in Kabul, commanding the Imperial Forces there. His son, Maharaja Ajit Singh (d. 1731), drove the Moguls out of Ajmer, and Maharaja Abhai Singh (d. 1750) took Ahmadabad.

During the reign of Maharaja Man Singh (1803-43) a treaty was concluded with the British in 1818. Maharaja Sir Takhat Singhji Sahib Bahadur, G.C.S.I. (1843-73), rendered loyal service during the Mutiny. His eldest son, Maharaja Sir Jaswant Singhji Sahib Bahadur II., G.C.S.I. (1873-95), was a vigorous, enlightened and generous ruler. Maharaja Sir Sardar Singhji Sahib Bahadur, G.C.I.E., succeeded in 1895, received full powers in 1898, and died in 1911. His Imperial Service Lancers served on the Frontier (1897-98) and in China (1900-01). Maharaja Sir Summair Singhji Sahib Bahadur, K.C.I.E., succeeded as a minor in 1911: he served in the Great War on the Western front (d. 1918).

Colonel and Air Commodore, R.A.F., H.H. Maharaja Sir Umed Singh Bahadur, G.C.S.I., G.C.I.E., K.C.V.O. (d. 1947), born in 1903, received full powers in 1923.

From the days of Maharaja Sir Jaswant Singh, his brother the late Lieut.-General Maharaja Sir Pertab Singhji Sahib Bahadur, G.C.B., G C.S.I., G.C V.O., LL.D , D C.L., A.D C., was Chief Minister or Regent. Sir Pertab Singh, who died in 1922, was Maharaja of Idar (p 205) from 1901 to 1911, and was famous throughout India as a great soldier-statesman. He took part in Queen Victoria's Jubilee procession. During the First World War he gave his personal services with the Jodhpur Imperial Service Lancers (Sardar Rissala)

The city (pop 126,842 in 1941), S of a range of sandstone hills running E and W., is surrounded by a strong wall nearly 6 m in extent, with seven gates, each bearing the name of the town to which it leads Some of the houses and temples in the city are of stone richly carved Amongst the most important buildings are the *Temple* in the Dhan Mandi (grain market), and the *Talatti Mahal*, an old palace now used as the Jaswant Female Hospital

The Fort stands up boldly some 400 ft. above the city and the plain The rock is on every side scarped, but especially at the S. end, where the palace is built on the edge of a perpendicular cliff at least 120 ft. high. Strong walls and numerous round and square towers encircle the crest of the hill. A modern road winds to a massive gateway of Victory. Here is the first of seven barriers thrown across the zigzag ascent, having immense portals with separate guards at each. On the wall of the last (Loha Gate) are hand-prints of fifteen widows of the Maharajas, who underwent *sati* at their deaths (six of them widows of Man Singh (1843).

At the top of the rock are the highly interesting *Old Palaces*. There are courtyards within courtyards, all solidly built and surrounded by lattice windows of the most delicate and beautiful designs Here in the *Jewel house* are the Maharaja's jewels — a wonderful collection, including diamond eyebrows, held by hooks over the ears. The silver trappings for elephants and horses should also be noticed. The view from the palace windows shows the town nestling under the huge rock The cenotaph to the N was erected to the memory of Maharaja Sir Sardar Singh

There was formerly great scarcity of water in the fort, and the women had daily to walk all the way to Mandor (see p. 213) to fetch it, but now it is brought up to the top of the fort in pipes. There is a well in the fort 450 ft deep. The principal Tanks are— the *Padam Sagar* Tank, in the N W. part of the city, excavated out of the rock, but of small size, in the same quarter is the *Rani Sagar*, at the foot of the W. entrance into the fort, with which it is connected by outworks, the *Gulab Sagar*, to the E., is handsomely built of stone, and is capacious, with a smaller one adjoining it; outside the city 1 m. W. is a lake called *Akherajji ka Talao*, which is a fine sheet, resembling a natural lake The *Kailana* Tank, close to the last-named, is the largest of all, with a capacity of 191 million c. ft. of water. The project owes its conception to Sir Pertab, and is now the greatest storage of drinking-water in Jodhpur. Farther N. is the old Residency, a fortified mansion among the hills. 3 m. N. of the city is the *Bal samand Tank*, with a palace on the em-

bankment and garden (1936), and a canal. The Umedsagar Lake supplies the waterworks

The chief sport near Jodhpur is *pig-sticking*, the animals being preserved.

S E of the city are the **Raikabagh Palace**, where H.H. the Maharaja resides, and the **Jubilee Buildings**, or public offices, near it, designed by Colonel Sir S Jacob in the Indian style 5 m to the S W is the school for the education of the sons of nobles and Rajputs

The palace, 2 m farther S at Ratanada, is used for important guests and personal friends of H H the Maharaja

The **Public Gardens** and fine stone houses of the officials have now replaced a barren tract that formerly bounded the city on the S side The Sardar Museum (1909) is comprehensive.

At about 1½ m outside the N.E. angle of the city is a small walled town of 800 houses, called the **Mahamandir**, or "great temple." The roof of the temple is supported by 100 pillars, and the interior is richly decorated. This town is defended by a stone wall, with a few bastions

Mandor.—This was the capital of Marwar before the foundation of Jodhpur It is situated about 5 m. to the N. of Jodhpur To the right are some of the *Chhattris*, or cenotaphs of the former rulers, erected on the spots where the funeral pyres consumed their remains. Some are fine, massive buildings, that dedicated to *Ajit Singh* (died 1731) being the largest and finest These "proud monuments," as Colonel Tod calls them,[1] are built of "a close-grained freestone of a dark brown or red tint, with sufficient hardness to allow the sculptor to indulge his fancy. The style of architecture here is mixed, partaking both of the Saivite and the Buddhist, but the details are decidedly Jain, more especially the columns"

On the left of the road is a pantheon called the *Shrine of the 300 million gods*, containing a row of gigantic painted figures of divinities and heroes. At the end of the long building where these figures are arranged is a curious fresco of a sea-piece Near this is the stone palace of *Abhai Singh*, who succeeded Ajit Singh The rocky plateau, site of the ancient city, is covered with heaps of debris, in the midst of which is a large ruined temple. Farther on is a group of *Chhatris* of the relations of the ancient Chiefs Beyond are the *Punch Kund*, or five small tanks, recessed naturally in the rock.

64 m. from Jodhpur and 128 m. from Marwar junction is **Merta Road** junction for Bikaner and Bhatinda. **Merta**, a fortified Marwar town, is 9 m. S E. and connected by a branch Only gateways remain Near this town was fought a decisive battle on the 11th September 1790, between the disciplined battalions of Mahdaji Rao Scindia, under the famous Benoit de Boigne, and the forces of the Maharajas of Jodhpur and Jaipur. The Rajputs fought with desperate valour "It is impossible," wrote de Boigne, "to describe the feats of bravery performed by the forlorn hope of the enemy, the *yard Kapra wallahs*" (men in yellow raiment, the garb of doom); but, in spite of their repeated charges, they were totally defeated. Close to the station is an enclosed Jain monastery of great sanctity.

[1] For full details see Tod's *Rajasthan*, ii 835 (Oxford edition, 1920)

Merta Road to Bikaner.

(Opened 1891.)

35 m. from Merta Road is **Nagaur.** The crenellated wall, houses, and groups of temples make an agreeable break in the monotonous desert

At 59 m is **Chilo** where the Bikaner State railway commences.

107 m from Merta Road is **Bikaner** (alt. 760 ft.), the capital of the Bikaner State in Rajputana. The city (pop 127,226 in 1941) was founded in 1488 by Rao Bikaji, son of Rao Jodhaji of Jodhpur (d. 1495), a Rajput of the famous Rathor clan, from whom the present house of Bikaner is descended.

The late General H.H Maharaja Sir Ganga Singh Bahadur, G.C S.I , G C.I.E., G C V O , G B E , K.C B , LL D , born 1880, succeeded 1887, and died 1943 Few Indian princes were better known in Europe. He was at the Imperial War Conferences in 1917 and 1919 as a representative of India, a member of the War Cabinet and a British Empire delegate at the Peace Conference

H H. Maharaja Sir Surat Singh, G C.I E , born 1902, is the 22nd Ruler

The State has an area of about 23,000 sq m , consisting largely of desert, and water is only found at a depth of 150 ft. to 300 ft The population is chiefly agricultural, and a fine breed of sheep, much valued for their wool, is produced. The Bikaner camels are well known, and the Camel Corps (Ganga Rissala) distinguished itself in China, commanded by the Maharaja, in 1900, and in Somaliland in 1903-4. It was also sent to Egypt during the War in 1914-15. The forces also include a regiment of Sadul infantry, a Dungar regiment of Lancers, a camel pack-battery, and a motor machine-gun section. In the city itself and in the large towns reside numbers of wealthy Marwari merchants, the "Lombards" of India

The city is situated on an elevation, and has an imposing appearance, being surrounded by a battlemented wall, and possessing many fine buildings. It is the fourth largest city in Rajputana The stone carving with which many of the houses are faced is unique.

The *Fort*, containing the old palaces, lying to the N E of the city, was begun by Raja Rai Singh (1571-1611), one of Akbar's distinguished generals. It is 1078 yds in circuit, and the view from outside is picturesque in the extreme. The palace buildings are the work of successive rulers, Among the finest are the Chaubara, erected by Raja Rai Singh, the Phul Mahal, the Chandra Mahal, the Gaj Mandir, and the Kachcheri—all built by Maharaja Gaj Singh (1746-1787), and specially the Anup Mahal, dating from the time of Maharaja Surat Singh (1788-1828), the Chetar Mahal and Chini Burj of Maharaja Dungar Singh (1872-1887), and the beautiful audience hall, called the Ganga Niwas. built by the late Maharaja, of finely carved red sandstone

The Fort also contains a fine library of Sanskrit and Persian books, and a valuable armoury, which includes the Order of the Fish and Alam Ambali (golden howdah), presented by Mughal Emperors, also the Nakli and Khasa State palanquins

The Private Secretary to the Maharaja should be addressed for leave to visit the palace

Facing the Fort is the Public Park. Of modern buildings in the suburbs, the Dungar Memorial College, the Walter Nobles' School, the King Edward

Memorial Road, and the temples completed by the late Maharaja, may be specially marked. Outside the city the principal buildings are the latest Palace, Lalgarh, of carved red sandstone, designed by the late Sir Swinton Jacob, the Victoria Memorial Club, the Public Offices, the King-Emperor's Hall, built to commemorate the visit to Bikaner of King Gorge V in 1905, when Prince of Wales Gajner Palace, on a lake, is 19 m S.W.

5 m. to the E. of the city is Devikund, where the *Chhattris* (cenotaphs) of the rulers of Bikaner are situated.

Other objects of interest are *Bandasar*, a Jain temple in the S.W. corner of the city, and dating from before its foundation; a *well*, 450 ft. deep, near the Fort, now pumped by electrical power, which also lights the whole camp and suburbs; and *Nagrechiji*, 2 m. S., containing an eighteen-armed image, a relic of Kanauj.

A visit should also be paid to the carpet and other manufactories at the Central Jail, for which Bikaner is famous.

The Bikaner Gang Canal, a portion of the Sutlej Valley Irrigation Project, was commenced in 1925, and opened by Lord Irwin, the Viceroy, in October 1927. It irrigates 1100 sq. miles of the Bikaner State. From the headworks at Ferozepore to the gates at Shivpur, a distance of 84 m., both the bed and the sides of the canal are lined with concrete. The experiment is the first of the kind to be made in India.

Bikaner is connected with Bhatinda (201 m. N.), also with Hissar (181 m. N.E.). Both lines belong to and are managed by the Bikaner State, since 1924.

From Merta Road jn. the Jodhpur Railway continues N.E. to **Degana**, 155 m. from Marwar Jn., whence there is a branch (opened 1909) *viâ* Sujangarh (connection with the Bikaner railway) to Ratangarh, continuing to Hissar (p. 344), opened 1911.

201 m. from Marwar junction is **Kuchaman Road**, Jn. of the Jodhpur Ry. and the B.B. and C.I., which works the 20 m. to **Phulera** (p. 219), on the main metre-gauge B.B. and C.I. Ry.

Between Kuchaman Road and Phalera is the *Sambhar Lake*, on the border of the Jaipur and Jodhpur States. The surrounding country is arid and sterile, being composed of rocks abounding in salt. The lake is 21 m. long from E. to W. after the rains, when the average breadth is 5 m. from N. to S., but the depth, 1 m. from the shore, is only 2½ ft. The water dries up from October to June, and leaves about an inch of salt in the enclosures.

From the 17th century the salt was worked by the Jaipur and Jodhpur Governments conjointly till 1870, when the British Government took leases from both States. The works under the Govt. of India Salt Dept. are on the E. and N. edges of the lake.

Excavations at Malisar (4 m.) have disclosed three layers of buildings, the middle layer of Kushan and Gupta periods, with baked bricks, the top dating about 800 A.D. The pottery is unique, and a coin of Huvishka has been found. A tank of burnt clay resembles others found at Taxila, Ur, and in Egypt.

Marwar Junction to Ajmer, Jaipur, Alwar, Rewari and Delhi

The main metre-gauge line of the B.B. and C.I. Ry. to Delhi proceeds from Marwar junction (p. 210) towards Ajmer. After leaving

557 m. from Bombay, **Haripur** station (D.B.), there is a rocky ascent, which continues until close to

578 m. from Bombay, **Beawar** station (D.B.) in Ajmer-Merwara, a long narrow tract skirting the Aravalli Hills between the States of Mewar and Marwar. There is a shrine here over the tomb of Col. C. G. Dixon, who was Superintendent of Merwara from 1836 to 1848, and commanded the Merwara Battalion, which he raised (1825), until his death in June, 1857. On the shrine, which is an object of worship by the Mers (cp. Kipling's story, *The Tomb of his Ancestors*), there used to be a glass case containing a richly embroidered silk dress, which had come from Paris for the Colonel's Indian wife (see *The India We Served*, by Sir W. Lawrence, p. 38).

611 m. from Bombay **AJMER** junction (D.B.K.). Limited accommodation at the stn. waiting-room: alt. 1593 ft. A line runs S. to *Khandwa* (see Route 8).

Ajmer,[1] the key to Rajputana (pop. 1941, 147,258), ceded by Daulat Rao Scindia (1818), is the capital of a British District in the Rajput States, which comprises two tracts, Ajmer and Merwara. The Resident for Rajputana, whose headquarters are at Abu (p. 207), is *ex-officio* Chief Commissioner of Ajmer-Merwara.

The city is situated in a basin at the foot of Taragarh Hill (2855 ft. above the sea). It is surrounded by a stone wall with five gateways. According to tradition, Ajmer was founded in 145 A.D. by Ajaipal, one of the Chauhan Kings.[1] It was sacked in 1024 by Mahmud of Ghazni, on his way to Kathiawar (but see f.n.), and again by Muhammad Ghori in 1193. After the invasion of Timur it was seized by Rana Kumbha of Mewar. The Muslim rulers of Malwa held it from 1470 to 1531, when it passed into the possession of Maldeo, the Rathor chief of Marwar. It was annexed in 1556 by Akbar, who was fully aware of its strategic importance and made it a royal residence.

Jahangir and Shah Jahan spent much time at Ajmer. An account of the city has been given by Sir Thomas Roe, the ambassador of James I., who was received in audience here by Jahangir[2] with "courtly condecension" on 16th January 1616, and went with him to Ujjain (p. 150) in the following year. While Roe was on his way to Ajmer, he was met by "the famous unwearied walker, Tho. Coryatt, who on foote had passed most of Europe and Asya and was now in India, beeing but the beginning of his travells." Coryat had spent £2, 10s. on the journey from Jerusalem to Ajmer. he died at Surat in December 1617.[3]

In 1720 Ajit Singh Rathor, son of Raja Jaswant Singh of Marwar, seized the city, which was recovered by Muhammad Shah, and made over by him in 1731 to Abhay Singh, the son of Ajit, as Viceroy on his behalf. In 1750 Abhai Singh's son Ram Singh, called in the Mahrattas, under Jai Appa Scindia, who seized and held it until 1787, when the Rathors recovered Ajmer, but after their defeat at Merta in

[1] See *Ajmer*, by Har Bilas Sarda (Scottish Mission Industries Co., 1911).

[1] The date of Ajaipal is placed much later —about 1100 A.D.—by Dr Bühler. Ana, the son of Ajaipal, who built the Ana Sagar embankment, is shown by an inscription found at Chitor to have been living in 1150.

[2] A picture by Sir W. Rothenstein, commemorating the audience, forms one of the frescoes in St Stephen's Hall, Westminster.

[3] See Sir William Foster's edition of *Roe's Journal* (p. 83; Oxford, 1926).

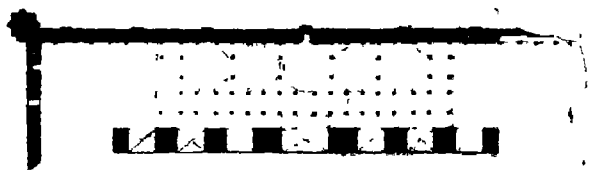
1790 the Rathors had to surrender it again to Scindia. On the 25th of June 1818 Daulat Rao Scindia handed it over by treaty to the British Government

Ajmer is the headquarters of about 1800 m. of metre-gauge railway, worked by the B B and C.I Railway Company. Near the railway station are very extensive workshops employing many thousand Hindu and Muslim workmen.

The **Residency** is on a hill overlooking the artificial lake called the **Ana Sagar,** constructed by Raja Anaji (1135-1150) and lying N. of the city and railway station It dams the water of the River Luni, which flows into the Runn

building. The central pavilion has been repaired, and is now used as the local Museum

The mosque, called the **Arhai-din-ka-jhonpra,** or "The Hut of two and a half Days," is just outside the S.W city gate, beyond the Dargah The name is derived from a tradition that it was built supernaturally in two and a half days Originally a Jain College, built in 1153, it was damaged by the Afghans of Ghor, who took Ajmer in 1192, and turned into a mosque by building a massive screen or façade of seven arches in front of the many-pillared hall This work was done by Qutb-ud-din in about 1200 The rows of slender pillars are probably *in situ*.



The Arhai-din-ka-jhonpra Mosque at Ajmer

of Cutch The Emperor Shah Jahan erected a noble range of marble pavilions on the embankment, which were the only public offices in Ajmer, until they were restored by direction of Lord Curzon (1899) The walk along the *bund*, or embankment (which is public), is very delightful To the W. is the broad expanse of the lake, and to the E , under the *bund*, is the *Public Garden* The Ana Sagar dries up after 3 years of scanty rainfall and the city is supplied with water from the *Foy Sagar*, formed by an embankment thrown across the valley 3 m. higher up

Akbar's Palace is inside the city, near the E. wall. The entrance gate is very fine. It was once an arsenal, and then used as a *tahsil*

Their ornamentation is very complex, no two being alike. The mosque is ruined, and only part of the screen of arches (200 ft. long), and part of the Jain hall behind them, now remain, the other three sides of the enclosure having disappeared The work was repaired in 1875-8 and 1900-3, and is a Protected Monument

The mosque was once very much larger than that at the Qutb near Delhi (p 308), the measurements of the exterior being 172 ft by 264 ft , and of the interior quadrangle 200 ft. by 175 ft The mosque proper measures 259 ft. by 57 ft , and has ten domes in the roof borne by 124 columns The screen in front of it is a work well deserving attention , it is the glory of the mosque,

and consists of seven "horizontal" arches like those with which Altamsh adorned the courtyard of the Qutb. In the centre the screen rises to a height of 56 ft., and at the corners above this arch rise two short minarets with Tughra inscriptions. Nothing can exceed the taste with which the Kufic and Tughra inscriptions are interwoven with the more purely architectural decorations and the constructive lines of the design.

The bridle-path to **Taragarh** (Star-Fort) passes this mosque, and reaches the summit in 2 m. The view from the top is very fine, but the ascent is somewhat trying, and had better be made in the early morning. There is also an interesting graveyard of Muslim martyrs, who fell in the assault of the fort.

The **Dargah**, picturesque, in the S.W. corner of the city, was commenced by Altamsh of Delhi and completed by Humayun. It derives its sanctity from being the burial-place of Khwaja Muin-ud-din Chishti (1143-1255), who was called Aftab-i-Mulk-i-Hind, the Sun of the Realm of India. He came to Ajmer in 1166. He was the son of Khwaja 'Usman, and was called Chishti from a quarter in the city of Sanjar in Persia. Of this family of saints and courtiers, Farid-ud-din is buried at Pakpattan, in the Punjab, Nizam-ud-din, Kutb-ud-din, and Nasir-ud-din at or near Delhi, Shaik Salim at Fatehpur-Sikri near Agra, and Banda Nawaz (1321-1422) at Gulbarga in the Deccan (p. 528).

The memory of the Ajmer Chishti was held in particular respect by the great Akbar, who was accustomed to pay a yearly visit to his shrine. Several of these pilgrimages were made on foot from Agra and other places. The road from Fatehpur-Sikri to Ajmer was so much used by Akbar that he caused "Kos Minars" (masonry columns answering to our milestones) to be erected along the route. Several of these minars can still be seen from the railway.

Visitors are expected to remove their shoes before entering the Dargah. Passing through a lofty gateway, a courtyard is entered, in which are two very large iron cauldrons. Rich Muslims who have not visited Ajmer pay for a feast of rice, ghi, sugar, almonds, raisins, and spices, to be cooked in one of these, the contents being ladled out and finally scrambled for by various families connected with the shrine, who live near the Dargah in a quarter known as Inderkot, and have a right to perform the ceremony called "looting the deg," which they do forcibly.

On the right is a mosque built by Akbar, with drums and candlesticks taken in 1576 from the army of Daud Khan Sultan of Bengal, and presented to the mosque by Akbar. Farther on in an inner court is a white marble mosque, 100 ft. long, and with eleven arches to the front, built by Shah Jahan; a Persian inscription runs along the whole front under the eaves. In the centre of the second court is the *Tomb* of the saint, a square building of white marble surmounted by a dome. It has two entrances, one of which is spanned by a silver arch. As at Fatehpur Sikri, the doors of the shrine are covered with votive horse-shoes, nailed there by horse-dealers to commemorate successful deals. Several doors in the precincts of the Dargah are plated with silver.

In a small enclosure with marble lattices is the **Mazar**, or tomb of Bibi Hafiz Jamal, daughter of

the saint, and W. of it, close by her tomb, is that of Chimni Begam, daughter of Shah Jahan. All these are considered too sacred to be approached by any one except Muslims There are some very fine trees in the enclosure.

At the S. end of the Dargah enclosure is the Jhalra, a deep tank partly cut out of the rock, and lined by steep flights of irregular steps

S E of the city is the **Mayo College**, for the education of the sons of Rajput Princes and nobles, opened by Lord Northbrook in 1875 The central building is of white marble; in front of it is a statue of Lord Mayo The subsidiary buildings have been erected by various States as hostels. The park round the buildings comprises 200 acres

The sacred Lake of **Pushkar** lies about 7 m. W of Ajmer.

The road skirts the W shore of the Ana Sagar, and at 3 m passes the village of Nausar, in a gap in the hills which divide the Ana Sagar and the Pushkar valleys This striking pass through the hills is 1 m. long Pushkar, the most sacred lake in India, lies in a narrow valley overshadowed by fine rocky hills, and is said to be of miraculous origin. Already in the 4th century it was one of the most frequented objects of pilgrimage, and is still visited during the great *mela* (fair) of October and November by about 100,000 pilgrims. On this occasion is also held a great fair for horses, camels, and bullocks

Although the ancient temples were destroyed by Aurangzeb, the five modern buildings, with their ghats on the margin of the lake, are highly picturesque. The temple to Brahma, at the farther end of the lake, is regarded as a peculiarly holy shrine, from the fact that it marks the spot where the incarnation of Brahma took place. It is usually said to be the only one in India Over the gateway is the figure of the *hans*, or "goose," of Brahma. The sacred crocodiles in the lake will be fed by the Mahants on request, when a small gratuity of one or two rupees will be appropriate. The D.B is in an Indian house on the lake

20 m E of Ajmer is the battlefield of Lakhairi (1792), where De Boigne just managed to defeat Tukoji Holkar

654 m from Bombay is **Naraina** station, headquarters of the Dadupanthi sect of reformers Their religion, ethics, and teaching are embodied in a mass of poetry written by one Dadu and his disciples A division of the sect is composed of military monks (Nagas), who serve in the army of the Jaipur State

660 m. from Bombay is **Phulera** junction.

A direct chord line (metre-gauge), 133 m long, runs N E to Reengus jn (in Sikar State) and Rewari (p. 225); to the W. a branch runs to Kuchaman Road (p. 215) and thence by the Jodhpur Ry to Degana, Merta Rd. (for Bikaner), Jodhpur and Marwar junction The mail train runs by the old main line

695 m from Bombay is **JAIPUR** station * (population 175,810, alt 1414 ft.; aerodrome), with three good hotels Passes to view the palace at *Jaipur*, and also the old palace at *Amber*, must be obtained from the Resident at Jaipur 24 hours beforehand. (The managers of the hotels obtain the passes.) Amber is the ancient capital and was founded in 928 A.D. Jaipur is the residence of the Maharaja and the

headquarters of the Resident. The State covers an area of 15,600 sq m.

Two of the later Rulers have been notable. Maharaja Sir Ram Singh succeeded Maharaja Jai Singh III. in 1835 and ruled until 1880. During the Mutiny he placed the whole of the resources of the State at the disposal of the British Raj. Maharaj Sir Madho Singh II (1880-1922) founded the Indian Peoples' Famine Fund The present Ruler, who is head of the Kachhwaha clan of Rajputs, is H.H Maharajadhiraja Sir Sawai Man Sing Bahadur, G.C S I , G C I E (born in 1911, succeeded in 1922)

In 1556 Raja Bhar Mal (who d in 1574) was presented at Akbar's court and gave him his daughter Mariam-zamani in marriage, she was the mother of Jahangir. Bhar Mal's grandson was the celebrated Raja Man Singh (d. 1615) whose name and fame are so closely associated with Akbar Jaipur derives its name from the famous Maharaja Sawai Jai Singh II (1699-1744), who founded it in 1728 This Chief stood by the son of Prince Azam Shah in the struggle for the Empire on the death of Aurangzeb, and drove the Mughals out of Jaipur The first treaty with the British was concluded in 1818 by Maharaja Jagat Singh, who died in that year

The town is surrounded on the N and E by rugged hills, crowned with forts. That at the end of the ridge overhanging the city on the N.W. is the Nahargarh, or "Tiger fort." The face of the ridge is scarped and inaccessible on the S. or city side, while on the N. it slopes towards Amber.

A crenellated wall, with seven gateways, encloses the city, which is the capital of one of the most prosperous States of Rajputana, and is a very busy and important commercial town, with large banks and other trading establishments. It is a centre of Indian manufactures, jewellery, coloured printed cloths and muslins The enamelwork is the best in India. The crowded streets and bazars are most lively. The jewellers' bazar is near the Sanganer Gate on the S The city is remarkable for the width and regularity of its main streets It is laid out in rectangular blocks, and is divided by cross streets into six equal portions The main streets are 111 ft wide, and are paved, and the city is lighted by electric light The procession at the Vasam Panchami festival (February) should be seen

The Maharaja's Palace, with its beautiful gardens and pleasure-grounds, ½ m. long, adorned with fountains, fine trees, and flowering shrubs, occupies the centre of the city and covers one-seventh of its area The whole is surrounded by a high embattled wall, built by Jai Singh, but many of the buildings included in it are of a later date The Chandra Mahal, which forms the centre of the great palace, is a lofty and striking building, seven storeys high, looking over the gardens. On the top storey there is a magnificent view over the centre city. Close by, to the right, on the ground floor, is the Diwan-i-Khas, or private hall of audience, built partly of white marble, also a Clock Tower and Armoury. H.H. the Maharaja resides at Rambagh, about 2 miles from the city.

E. of the Chandra Mahal is the famous Jantra (Yantra), or Observatory, the largest of the five built by the celebrated astronomer, Jai

Singh II. (1699-1744); the others are at Benares, Delhi and Ujjain (one at Muttra has disappeared). It is a courtyard full of curious masonry instruments invented and designed by him It was constructed between 1718-34 A.D, and was restored by Mahdo Singh II. of Jaipur through the agency of the late Lieutenant A. Garrett, R E., and Pandit Chandradhar Guleri, who published a monograph upon it (on sale)

The principal instruments are, first on the W., the two circular Ram Yantras for reading altitudes and azimuths, with twelve horizontal sectors of stone radiating from a round vertical rod, then E. of these, the twelve Rashivalayas for determining celestial latitudes and longitudes; and next, the great Samrat Yantra, or gnomon, 90 ft. high, situated between two graduated quadrants, with sextants in a chamber outside them. The gnomon's shadow thrown by the sun touches the W. quadrant at 6 A M, gradually descends this at the rate of 13 ft per hour till noon, and finally ascends the E. quadrant. To the N. of this is a Dakhshina Bhitti Yantra, or meridional wall, near which is a large raised platform known as Jai Singh's seat, and near it are two brass circles, one of which is a map of the celestial sphere. Between these and the Ram Yantras are a number of other instruments, known as the Kranti Yantra, the Kapali, and the Chakra Yantra, the last being a graduated brass circle corresponding to the modern equatorial.

S.W. of the Observatory, and adjoining the Tripolia (Three Arches) Gate, are the royal **Stables**, round courtyards; and beyond, towards the E, is the Hawa Mahal, or **Hall of the Winds**, of five storeys, built by Maharaja Mahdo Singh I. (1751-68), overlooking one of the chief streets.

Near the Tripolia Gate rises the Iswari Minar Swarga Sul, the "Minaret piercing heaven," built by Raja Iswari Singh (1744-1751) to overlook the city.

The **Public Garden**, outside the city wall to the S., 36 acres in extent, laid out by Dr de Fabeck, contains a zoo There is a fine *statue of Lord Mayo* in them, and in the centre is the **Albert Hall**, designed and built by the late Sir Swinton Jacob, K C I.E., of which King Edward VII. laid the first stone in 1876. It contains a large Darbar Hall and a Museum (1887), with collections of modern works of art and industry, and also of antiquities, from every part of India There is a fine view from the top

The **Mayo Hospital**, beyond the gardens, is of rough white stone, with a clock tower It can house 150 patients.

The **Jaipur State** possesses a fine army consisting of a Guard battalion, two battalions of infantry and a cavalry regiment

The **Transport Gardens**, now commonly called the Naya Ghat, were laid out by Rai Bahadur Major Dhanpat Rai Sardar Bahadur, C.I E., the Commandant of the Corps in 1896, in the bed of the Amrisha Nulla, adjoining the Transport lines, and are more than 2 m. in length.

The **Church** is near the hotels and on the way to the railway station, a little to the W of the road. There is also a R.C. church at Ghat Darwaza.

At the School of Art, a handsome modern building, are first-rate technical and industrial classes for teaching and reviving various branches of local artistic industry—such as metal and enamel-work, embroidery, weaving, etc

The Maharaja's College.—The College, founded in 1844 and maintained entirely by the Darbar, was moved outside the city in 1930, into a large building, and is a free institution It is a first-grade college, being affiliated to the University of Allahabad, up to the M A standard in Arts and B Sc standard in Science

The Maharaja's Public Library — This was founded by Maharaja Sir Ram Singh in 1866 for the educated public. It contains English, Sanskrit, Hindi, Persian, Arabic, Urdu, and other books. The very valuable Razm-Namah contains 169 miniatures

The *Chhattris*, or *cenotaphs of the Maharajas*, at Gethur are just outside the N.E city wall They are in well-planted gardens, the trees of which are full of solemn-looking grey-headed monkeys. The first seen on entering is the Chhattri of Maharaja Jai Singh II.—the finest of all. It is a dome of the purest white marble, supported on twenty beautifully carved pillars rising from a substantial square platform, and profusely ornamented with scenes from Hindu mythology. S.E. of Jai Singh's *Chhattri* is that of his second son, Mahdo Singh I. (1774-79), a dome rising from the octagon on arches reversed The only ornaments are carved peacocks. W. of this *Chhattri* is that of Pertab Singh, his son (1779-1803), completed by Maharaja Sir Ram Singh (1835-80). It is of white marble brought from Alwar

The water which supplies Jaipur comes from waterworks at Ramgarh lake, about 11 m N. of the city.

An expedition for the sake of the *view* may be made 1½ m. from the E or Surya Gate, to the *Shrine of the Sun God* at *Galta*—350 ft. above the plain, on the summit of a range of hills about 1½ m to the E of Jaipur

Behind the temple is a deep gorge filled with temples and sacred tanks shadowed by rugged crags, a paved causeway leads through the ravine

There is also a pleasant drive to a similar gorge along the *Agra Road*, 2 m E

The **excursion to Amber**[1] (5 m. from the city gate and 7 m from the hotels), the capital of Jaipur till 1728, will occupy a whole morning. A motor road extends all the way.

On the left of the road a line of fortified hills is passed; these culminate in the great *Fort*, 400 ft above the old palace, connected with it and built for its defence. The picturesque situation of Amber at the mouth of a rocky mountain gorge, in which nestles a pretty lake, has attracted the admiration of all travellers, including Jacquemont and Heber It was founded by the Minas, and was flourishing in 967 In 1037 it was taken by the Rajputs, who held it till a move was made to Jaipur

The Old Palace at Amber, begun by Man Singh I. (1600),[2] and completed by Jai Singh I., lies low on the slope of the hill, picturesquely rooted on its rocky

[1] Locally pronounced *Am-air*.
[2] Man Singh was the nephew of Raja Bhagwan Das, the friend of Akbar

base and reflected in the lake below. The interior arrangements are excellent. The suites of rooms form vistas opening upon striking views.

Entered by a fine staircase from a great courtyard is the Diwan-i-'Am, with a double row of columns supporting a massive entablature, above which are latticed galleries. Its magnificence attracted the envy of Jahangir, and the Mirza Raja,[1] to save his great work from destruction, covered it with stucco

To the right of the Diwan-i-'Am steps is a small temple of Kali (Mateswari), worshipped by the Guard battalion at the Dussara festival.

On a higher terrace are the Maharaja's apartments, entered by a splendid gateway covered with mosaics and sculptures, erected by Jai Singh I, over which is the *Sohag Mandir*—a small pavilion with beautiful latticed windows. Through this are further marvels—a green and cool garden with fountains, surrounded by palaces, brilliant with mosaics and marbles. That on the left is the *Jai Mandir*, or Hall of Victory, adorned by panels of alabaster, some of which are inlaid, and others are adorned with flowers in alto-relievo, "the roof glittering with the mirrored and spangled work for which Jaipur is renowned." Near the Jai Mandir a narrow passage leads down to the bathing-rooms, all of pale creamy marble. Above is the *Jas Mandir*, "which literally glows with bright and tender colours and exquisite inlaid work, and looks through arches of carved alabaster and clusters of slender columns upon the sleeping lake and the silent mountains."

At the N.E. angle is a balcony, whence there is a fine view over the town of Ambèr and the plain beyond to the hill which overlooks Ramgarh. Some *Chhatris* outside the wall are those of Chieftains who died before Jai Singh II. In the palace to the right is a chamber, on the right wall of which are views of Ujjain, and on the left views of Benares and Muttra That opposite the Jai Mandir is called the *Sukh Niwas*, "Hall of Pleasure" In the centre is an opening for a stream to flow into the channel which runs through the hall The doors are of sandalwood inlaid with ivory.

A steep path leads down to the Khizri Gate, beyond which, as it leads to one of the forts, Kantalgarh, no one is allowed to pass without an order At the bottom of this path there is a temple to Thakurji, or Vishnu It is white and beautifully carved, and just outside the door is a lovely square pavilion exquisitely carved with figures representing Krishna sporting with the Gopi milkmaids.

Ambèr formerly contained many fine temples, but most are now in ruins On a Temple of the Sun is an inscription (955 A D)

Sanganer, about 8 m. to the S. of Jaipur, may be reached by a drive past the Residency and the Moti Dongari, or by railway

The road into the town is through two ruined Tripolias, or triple gateways of three storeys, about 66 ft. high. The second storey has an open stone veranda, supported by four pillars on either side of the archway. On the right ascending the street is a small temple sacred to *Kalyanji*, or *Krishna*, the door of which is handsomely carved Opposite is a temple to Sitaram, with a pillar, 6 ft high, of white Makrana marble, called a Kirtti Khambh. On the four sides are Brahma, with four faces; Vishnu, cross-legged, holding the lotus, Siva, holding

[1] Raja Jai Singh I. (d. 1668) was known by this title.

a cobra in his right hand and a trident in his left, with Parvati beside him, and Ganesh

Higher up, on the left, are the ruins of the *Old Palace*. N. by E. from this is the *Sanganer Jain Temple*, with three courts, and finely-carved marble work Visitors are not allowed to enter the third.

52 m. from Jaipur on the Alwar road, at Bairat, is a Jain temple (1587 A.D.), a Buddhist monastery, and circular temple Coins of Greek and Indo-Greek Kings were found (1940)

The Jaipur State Railway (metre-gauge) runs from Siwai Madhupur where it connects with the B B and C.I. Ry broad-gauge line (p. 248), to, 83 m., Jaipur, and then continues N. through Reengus (jn. with the Phulera-Rewari line) to Sikar, 147 m., and 187 m., Jhunjhunu, in Jaipur territory (no express trains).

751 m. from Bombay is **Bandikui** junction (R.). Railway workshops, and a colony of railway employés. The line (opened 1874) for *Agra* branches off E (see Route 12)

788 m from Bombay, **ALWAR** is the capital of the State, founded in 1771 by Rao Pratap Singhji of Machen (d. 1791), who threw off allegiance to Jaipur. It has an area of 3185 sq m. The town is on rising ground, dominated by the Fort, which crowns a conical rock and is backed by a range of hills. The Ruler, H.H Sir Shri Sawai Tej Singhji Bahadur, K.C.S.I. (succeeded 1937), belongs to the Thawa branch. The late Ruler was by race a Naruka Rajput of the Kachhwaha clan. He was descended from the Suryabansh (the Solar dynasty), belonging to the ancient royal family of Amber (Jaipur). The title of Maharaja was conferred in 1889 upon His Highness's predecessor, Maharao Raja Sir Mangal Singh, G.C.S.I.

The Dak Bungalow is about 100 yds from the railway station. Carriages from the State Stables are available on hire by application to the "Munsarim Buggikhana."

Palaces.—There are palaces in the capital, one of them being the Vinai Vilas Palace, named after the late Maharao Raja Vinai Singhji (1815-57), and now used for His Highness's Government Offices The city palace is at the very end of the city and consists of a group of buildings partly detached, and built in a variety of styles, separated from the base of the mountain by a picturesque tank (Sagar) The handsome Shish-Mahal (Mirror room) overlooks the tank

This palace contains a *Library*, kept in excellent order, and rich in Oriental manuscripts. Eminent Sanskrit and Persian scholars from Western countries visit this library to take copies of ancient manuscripts. A matchless *Gulistan*, which cost about £10,000 to produce, is beautifully illustrated with miniature paintings It was finished in 1848 by the order of Maharao Raja Vinai Singhji. Another beautiful book is the *Dah Pand*, written in 1864

The *Armoury* contains a splendid collection of sabres and other weapons finely wrought and finished and studded with jewels; also of handsome swords with hilts of gold Dozens of these swords are from Persia, while many of them were made at Alwar, in imitation of the Ispahan steel. The arms of Maharao Raja Vinai Singhji could only be worn by a man of great stature. Permission to visit these palaces must be obtained from the Prime Minister.

The Lansdowne Palace is on a hill. On the W. of the Sagar are temples and shrines with Bengali roofs; and raised upon the centre of a platform on the S is the cenotaph of the late Maharao Raja Bakhtawar Singhji (1781–1815). The plinth is made of red sandstone and the cenotaph itself of beautiful marble with Bengali arches. Visitors entering must take off their shoes. Hundreds of pigeons fly about and stately peacocks strut about the stone pavements

In the city, just right of the main palace-entrance, is the house of the Elephant carriage. It was built by Maharao Raja Vinai Singhji It is a car two storeys high, and can carry fifty persons, drawn by four elephants

The *Purjan Vihar* (Garden).—This is a public park on the outskirts of the town In the centre is a summer-house, with fountains and beautiful ferns There is also a small menagerie

There is little to see at the *Fort*, except the view from this great height of the city below and the surrounding country interspersed with lakes The old ascent is steep, and is paved with slippery stones At a point about 150 ft up, the steepest part begins It is called Hathi Mora, "the Elephant's turn," because they could not go further, a motor road now runs right up to the top of the hill. Behind the fort, at a distance of 1 m, is the Chhatri of Maharao Raja Pratap Singhji (d 1791), the Founder of the State, and, alongside it, is a small monument of his Maharani who became *sati*

The tomb of Fateh Jang, a Minister of Shah Jahan, near the station, on the Bharatpur road, is a conspicuous object with an immense dome, and bears the date, in Nagri, 1547. In the interior there is plaster-work in relief, with flat surface patterns and rectangular mouldings.

2 m. to the S is the Artillery Ground and Top Khana, "Artillery Arsenal."

Alwar and its outskirts are supplied with water from Siliserh lake, 6 m S W. of the city A masonry dam, about ½ m long, and 4 m. from the Moti Doongri hill, has been constructed, at a cost of Rs 8 lakhs to impound water from the Rupaiel river. The water stored by this masonry dam, amounting to some 1100 millions of c ft, forms a splendid reservoir, covering an area over 4 sq m It is known by the name of "Jey Samand Lake," named after the late Maharaja, and is ornamented with beautiful Chhatris (domed pavilions).

There is plenty of small game, including panthers, in the neighbourhood of Alwar, while the State Forests abound in tigers but they are strictly preserved Shooting licences can be obtained on application to the Army Minister

20 m E of Alwar, and adjoining the Mewati hills, is the battlefield of Laswari, where General Lake annihilated the last brigades of Daulat Rao Scindia's French-trained army on 1st November 1803 This great British leader, within a space of two months, and with a force never exceeding 8000 men, crushed 31 battalions of Scindia's troops in four pitched battles, and captured 426 guns He took two fortresses (Aligarh and Agra), and entered the capital of India (Delhi) deliverer of the Mughal king.

794 m from Bombay and 52 m from Delhi is **Rewari** junction (R, D B and Hindu-Muhammadan Hotel) Rewari was founded in 1000 A.D by Raja Rawat. There are the ruins of a

still older town E. of the modern walls. The Rajas of Rewari were partially independent, even under the Mughals. Near the town they built the mud fort of Gokalgarh, which was once very strong They coined their own currency, called Gokal Sikka Rewari is a place of considerable trade, particularly in iron and brass The Town Hall is handsome, as are the Jain Temples and Tej Singh's Tank, close to the town

From Rewari a metre-gauge line, 187 m. (opened 1884), runs N W. to Hissar and Bhatinda Jn., where connection can be made with the N W. Ry broad-gauge mail route from Delhi to Ferozepore and Lahore (Route 15)

On the chord line (opened 1905), 134 m from Rewari to Phulera (p. 219),

32 m S W. of Rewari lies **Narnaul**, added to the Patiala State for loyal services rendered in 1857

On the main line, opened 1873, is

826 m from Bombay, **Gurgaon**, the headquarters of the South-Eastern District of the Punjab Two metalled roads E to Delhi, one road 15 m S to Sohna, thence bifurcating S E to Palwal (p 258) and S to Alwar Sohna is remarkable for a hot-spring, situated in the town which is close to hills, some crowned with the walls and bastions of an unfinished fort The water of this spring is strongly impregnated with sulphurous acid, which, however, evaporates very rapidly. The spring is covered with a domed building and surrounded by small open bathing tanks The water is considered of great value for purposes of **rheumatism, gout, and skin diseases.**

845 m from Bombay is **DELHI Central station * (Route 14)**

ROUTE 11.

From AHMADABAD through KATHIAWAR by **Viramgam, Kharaghoda, Wadhwan, Palitana** (for **Satrunjaya Hill**), **Bhaunagar, Junagadh, Girnar, Somnath, Porbandar, Rajkot, Jamnagar** and **Dwarka**, and back to Ahmadabad

The peninsula of **Kathiawar** is believed to have been an island in remote times It has an approximate area of 20,332 sq m of which 1298 sq m are assigned to the British district of Ahmadabad, about 1245 sq m form part of the State of Baroda, and 20 sq m constitute the island of Diu, a Portuguese possession on the S The remaining area is apportioned among 189 States of which seventeen are "Salute" States and the rest range in extent from considerable tracts of country, with chiefs enjoying great executive freedom, to clusters of villages which are States only in name The capitals of most of the principal States will repay a visit.

The largest State is **Cutch**, which has an area of 7616 sq m., exclusive of the Runn of Cutch, which covers about 9000 sq m The late Maharao, H H Sir Khengarji Sawai Bahadur, G C S I, G.C I E, a Jadeja Rajput claiming descent from Sri Krishna, Lord of Dwarka and head of the Yadav race, was born in 1866, succeeded in 1876, and died 1942 He received full powers in 1885, and attended the Imperial Conference in London and the League Assembly at Geneva in 1921 as a representative of India The State consists of a belt of land cut off from the mainland by the Runn on the N and E, the Gulf of Cutch on the S., and the Arabian Sea on the W, and is

difficult of access. Steamers run about twice a week from Bombay to Mandvi, the chief port (on the S.) from which there is a road to Bhuj (aerodrome) in the centre of the State, noted for the work of its silversmiths There is a narrow-gauge ry (37 m) from Bhuj to Tuna, which faces the mainland of Kathiawar, with branches

Cutch and the Kathiawar States are under the political control of the Resident, Western India States, who resides at Baroda (p 244); and there are Political Agents for E and W Kathiawar, with hdqrs. at Wadhwan (p 228) and Rajkot.

Everywhere in Kathiawar there are long lines of *palias*, or memorial stones, peculiar to this Province, on which men are usually represented as riding on a very large horse, whilst women have a wheel below them to indicate that they used a carriage A woman's arm and hand indicate a monument to a *sati* lady

There is much game in Kathiawar, and specially in the Gir, the large wild tract, with its 1500 sq m of forest to the S E of Junagadh, but the Gir is very unhealthy in the early autumn, and again at the beginning of the rains There are no tigers in the peninsula, but up to the middle of the nineteenth century lions inhabited all the large jungles, and were shot in the Choteyla Hills E of Rajkot. The few left are confined to the Gir, and strictly protected. The Gir lion, the only Asiatic species, is in no way inferior to the African species, although the mane is not so large and is sometimes absent

The Kathiawar Mail leaves Bombay (Central) daily, and proceeds on the broad gauge to

Ahmadabad (p. 197), 306 m **from** Bombay From 4 m., ***Sabarmati*** **junction on the** *N.* bank of the river, the metre-gauge continues N. to Delhi and Agra The broad-gauge (opened 1871) turns W, and passing through a well-cultivated country, reaches

346 m **Viramgam** junction —a walled town. The Mansar Tank dates from 1100. It is shaped like a shell, and surrounded by a flight of stone steps; round the tops of the steps runs a row of small temples, in the sides of which there are holes, through which it is said a rope used to pass, enabling a worshipper to ring the bells in all the temples at once The neighbourhood abounds in black buck, sand-grouse, and all manner of water-fowl

From Viramgam a B G. line runs N W, passing at 18 m Patri (D.B), a small walled town with a citadel, and, at 23 m reaches **Kharaghoda**, where there are very extensive salt-pans on the edge of the **Little Runn of Cutch.**[1]

In the dry season the **Runn** presents the appearance of a hard, smooth bed of dried mud, and may be ridden over at any place There is absolutely no vegetation except on some small islands which rise above the level of the salt inundation the only living creatures are herds of wild asses (rarely seen), which feed on the lands near its shores at night, and retreat far into the desert in the daytime With the commencement of the S W monsoon in May the salt water of the Gulf of Cutch invades the Runn, and later in the season the rivers from Rajputana pour fresh water into it The sea is now encroaching rapidly on the Runn at its junction with the Gulf of Cutch, and there is reason to suppose that serious changes of level are taking

[1] *The Great Runn lies N of the State of* Cutch and separates it from Sind

place. The centre of the Runn is slightly higher than the borders, and dries first. The railway has many sidings extending into the Runn, to facilitate the collection of the salt, which is stacked at the station in very large quantities under the custody of the Bombay Salt Department The salt is evaporated by the heat of the sun from brine brought up in buckets from depths of 15 ft to 30 ft. A cactus hedge to prevent smuggling of salt ran, and is still traceable in parts, to Delhi, but the cochineal insect is an enemy. Wonderful mirages are seen in the Runn, and in the winter season the flights of flamingoes and other birds are extraordinarily large There are sand-grouse and Imperial grouse and many wild-fowl.

The Kathiawar Mail proceeds from Viramgam by metre-gauge to

386 m from Bombay, **Wadhwan** junction (D B) To the N runs the *Dhrangadhra State Railway*, and to the S the *Bhaunagar State Railway*, which connects at Dhola jn (see p 229) with the *Gondal-Porbandar Railway*, which opens up a large tract of country in S Kathiawar, To the W the *Morvi Railway* runs to *Rajkot*, thence the *Jamnagar State Railway* runs to *Jamnagar* and *Dwarka* (p. 245), terminus of the Kathiawar mail route, and the *Jetalsar Rajkot Railway* to *Jetalsar*, where it crosses the *Gondal-Porbandar* line The *Junagadh Railway* runs from *Jetalsar* to *Veraval* viâ *Junagadh*, and from *Junagadh* to *Visavadar* All the railways in *Kathiawar* are on the metre-gauge and managed by States or combinations of States.

The *Civil Station of Wadhwan*, in which the railway station is built, is land rented by the Government of India in perpetuity from the Thakore Sahib of Wadhwan for the location of the establishments necessary for the administration of the E. portion of Kathiawar The Civil Station is 3 miles W. of Wadhwan city, connected by a tramway and by the *Bhaunagar Railway*

At the *Talukdari School* the sons of *Girassias*, or Rajput landowners, are educated when their parents are unable to afford the cost of sending them to the *Rajkumar*, or *Princes', College*, at *Rajkot* In many cases elder brothers are placed at the Rajkumar College and the younger at the Talukdari School.

Dhrangadhra, on the *Dhrangadhra State Railway* running from Wadhwan to Halwad, is the capital of the Dhrangadhra State, which covers an area of 1167 sq m The late ruler, H H Maharaja Sir Ghanshyamsinhji Ajitsinhji, G.C.I E, K C.S I (born 1882, succeeded 1911, and died 1942), was head of the clan of Jhala Rajputs, a subdivision of the Makwana family, said to have ruled at Kirati, near Nagar Parkar in Sind Industries are the Shri Shakti Alkali works and weaving fabrics with silver and gold thread The Khuda Ry, 14 m, was opened in 1923, for developing the State salt works

Proceeding S from Wadhwan jn by the Bhaunagar State Railway, the river is crossed close to the station

4 m. **Wadhwan City** station (R, D B, alt 404 ft.) The town wall is of stone. Towards the centre, on the N. wall, is the ancient temple of **Ranik Devi** She was a beautiful girl, born in the Junagadh territory when Sidh Raja was reigning at Patan Anhilwara, and was betrothed to him But Ra Khengar, who then ruled Junagadh, carried her off and married her, which caused a feud between him and Sidh Raja, whose troops marched to Junagadh. Khengar was betrayed

by two of his kinsmen, and was slain by Sidh Raja and his fortress taken. The conqueror wanted to marry Ranik Devi, but she performed *sati*, and Sidh Raja raised this temple to her memory. It bears marks of extreme old age, the stone being much worn; all but the tower is gone Inside is the effigy in relief of Ranik Devi, and a smaller one with a representation of the goddess Ambaji N. of this temple, and close to the city wall, is a *sati* stone dated 1519 Near the Lakhupol Gate is a well with steps, ascribed to one Madhava, who lived in 1294 A D

The *Palace* in the centre of the town has four storeys, and is 72 ft high. It stands in a court facing the entrance, on the right of which is a building called the Mandwa, where assemblies take place at marriages There is also a Palace called the *Balchandra Vilas*, built by Thakore Sahib Balsinhji (1885–1910). The present Thakore Sahib, Shri Surendrasinhji Jorawarsinhji, who is a Jhala Rajput, was born in 1922 and succeeded in 1934

17 m. **Limbdi** station—chief town of the cotton-producing Limbdi State with a handsome Palace The late Thakore Sahib, Sir Daulatsinhji Jaswantsinhji, K.C.S.I , K.C I E , a Jhala Rajput, was born 1868, succeeded 1908, and died 1940. The house is said to have sprung from The Harpaldev, who showed great valour at the Court of Karan Waghelo, King of Gujarat. Limbdi town manufactures ivory bangles and brass-plated boxes Education is free.

20 m S.E. Rangpur is a chalcolithic site

47 m. **Botad** junction. Frontier of the Bhaunagar State Branches to (1) **Jasdan**, capital of the State of that name, and (2) Dhanduka jn. for Dholka and (30 m. by road) **Dholera** port

74 m. from Wadhwan is **Dhola** junction (R.). From here the *Gondal-Porbandar Railway* runs W. to Dhasa, Jetalsar, Dhoraji and Porbandar, a branch of the Bhaunagar State Ry. goes S to (23 m.) Sava Kundla, and (72 m.) Mahuva, on the Gulf of Cambay, with a jn. at Dungar to Port Albert Victor.

Two excursions can be made if the visitor continues E. to Bhaunagar by the main line of the *Bhaunagar State Railway*.

87 m from Wadhwan jn. on this line is **Songadh** for the ancient city of **Valabhipur**, which is nearly identical with the modern town of Vala, 12 m N by road, capital of a State The authorities at Songadh will arrange for the journey; or the visitor may travel by road from Dhola Jn., on the Bhaunagar State Ry, by a conveyance which will be supplied by the Vala State, if application be made beforehand.

Valabhipur, the capital of all this part of India, was perhaps as old as Rome (573 B C) Vallabhi kings, as shown by copper-plate grants, reigned from A.D 480–790, the dynasty was founded by the Senapati of the Guptas Hieuen Tsang visited it (639). Old foundations, terra-cotta, coins (apparently Andhra), copper plates, mud seals, beads, stone bulls, and household images have been found. Specimens have been placed in the Museum. The ruins cover a large area.

Resuming the railway route from Songadh to Bhaunagar, the traveller passes, 91 m from Wadhwan, **Sihor** station (D B.), jn. for Palitana, 17 m Sihor was at one time the capital of the Bhaunagar branch of Gohel Rajputs The town, 1½ m S of the railway, has interesting Hindu temples. The name is a corruption of "Singhpur," "the lion's city"; a still

more ancient name is "Saraswatpur." It is famous for copper and brass work, snuff and plaster (chunam). Near the S wall is situated Brahma Kund, the water of which possesses special virtue Farther up the River Gautami lie the Gautam Kund and Gautameswar Mahadev

Palitana, 18 m by rail from Sihor stn, is much enriched by pilgrims during their visit to the *Holy Mountain* of Satrunjaya and its famous Jain temples The Thakore Sahib, Sir Bahadursinhji Mansinhji, K.C.S.I, K.C.I.E, a Gohel Rajput, of the same clan as the Maharaja of Bhaunagar and House of Lathi, was born in 1900 and succeeded in 1905, he was educated at Shrewsbury and received full powers in 1919. In 1928 he was deputed to attend the League Assembly at Geneva The State covers an area of 288 sq. m and was founded by Shahji There is a State Paddock, where horse-breeding from pure Kathi stock is carried on

The distance from Palitana to the foot of Satrunjaya, or the **Holy Mountain,** 1977 ft above sea-level, is 1½ m The road is level, with a good water supply, and shaded The ascent begins with a wide flight of steps, guarded on either side by a statue of an elephant. The hillside is in many places excessively steep, and the mode of conveyance is a *dholi*—a seat or tray 18 in square, slung from two poles and carried by four men. As few of the higher-class pilgrims are able to make the ascent on foot, there is an ample supply of *dholis* and bearers.

The Satrunjaya Hill is truly a city of the gods with 863 temples, there is nothing else within the gates; there is a cleanliness about every square, passage, porch and hall The silence, too, is striking. Now and then in the mornings a bell sounds for a few seconds, or a drum is beaten for as short a time, and on holidays chants from the larger temples meet the ear; but generally during the afternoon the only sounds are of vast flocks of pigeons that fly about spasmodically from one temple to another. Paroquets and squirrels, doves and ringdoves abound, and peacocks are occasionally met with on the outer walls The top of the hill consists of two ridges, each about 350 yds long, with a valley between Each of these ridges, and the two large enclosures that fill the valley, are surrounded by massive battlemented walls fitted for defence The buildings on both ridges, again, are divided into 9 separate enclosures called *tuks*, generally containing one principal temple with varying numbers of smaller ones Each of these enclosures is protected by strong gates and walls, and all gates are carefully closed at sundown

No attempt is made to describe the shrines in detail, their general character is so often repeated that it would only be possible to do so with the aid of profuse illustrations. The area enclosed on the top is small enough for any one of ordinary activity to see all over it in a two hours' visit

There is one gate leading into the enclosure, but there are nineteen inner gates, leading to the nineteen chief temples Not far from the *Ram-pol* ("pol" means gate) is a resting-place used by persons of distinction, with a tolerable room surrounded by open arches. There is no accommodation for ordinary European visitors

Fergusson wrote. "The grouping together of their temples into what may be called 'Cities of Temples' is a peculiarity which the Jains practised to a greater

extent than the followers of any other religion in India The Buddhists grouped their stupas and viharas near and around sacred spots, but they were scattered, and each was supposed to have a special meaning. The Hindus also grouped their temples, as at Bhubaneswar or Benares, in great numbers together, but in all cases, so far as we know, because these were the centres of a population who believed in the gods to whom the temples were dedicated, and wanted them for the purposes of their worship Neither of these religions, however, possesses such a group of temples, for instance, as that at Satrunjaya It is a city of the gods, and meant for them only, and not intended for the use of mortals. All the peculiarities of Jain architecture are found in a more marked degree at Satrunjaya than at almost any other known place, and, fortunately for the student of the style, extending over a considerable period of time Some of the temples may be as old as the 11th century, but the Muslim invaders of the 14th and 15th centuries made sad havoc of all the older shrines, and we have only fragments of a few of them In the latter half of the 16th century, however, the Jains obtained tolerance and security, and forthwith began to rebuild their old fanes From 1500 they are spread pretty evenly over all the intervening time down to the present century."

In one case the roof is diagonal to the porch The Chaumukh temple is four-faced.

Dr Burgess has given the following general description :—

" At the foot of the ascent there are some steps with many little canopies or cells, 1½ ft. or 3 ft. square, open only in front, and each having in its floor a marble slab carved with the representation of the soles of two feet (*charan*), very flat ones, and generally with the toes all of one length A little behind, where the ball of the great toe ought to be, there is a diamond-shaped mark divided into four smaller figures by two cross lines, from the end of one of which a curved line is drawn to the front of the foot. The path is paved with rough stones all the way up, only interrupted here and there by regular flights of steps. At frequent intervals also there are rest-houses High up we come to a small temple of the Hindu monkey-god, Hanuman, the image bedaubed with vermilion in ultra-barbaric style At this point the path bifurcates, to the right leading to the N. peak, and to the left to the valley between, and through it to the S summit A little higher up, on the former route, is the shrine of Aengar, a Musalman *pir*, so that Hindu and Muslim alike contend for the representation of their creeds on this sacred hill of the Jains."

On reaching the summit of the mountain, a panorama presents itself from the top of the walls To the E the prospect extends to the Gulf of Cambay near Gogha and Bhaunagar, to the N it is bounded by the granite range of Sihor and the Chamardi peak, to the N.W. and W the plain extends as far as the eye can reach From W to E, like a silver ribbon across the foreground to the S, winds the Satrunjaya River, which the eye follows until it is lost between the Talaja and Khokara Hills in the S.W

104 m. from Wadhwan the terminus **Bhaunagar**, founded 1723, stands on a tidal creek from the Gulf of Cambay. It has an aerodrome, a safe harbour for shipping of light draught, and carries on an extensive trade, as one of the principal markets and harbours

of export for cotton in Kathiawar. The Bhaunagar State has from its first connection with the British Government been administered by men of intelligence, and Indian government goes hand in hand with European progress. The staple export is cotton. There are no interesting ruins, but abundance of very handsome modern buildings on Indian models, water-works, reservoirs, and gardens, and at the port will be seen modern mechanical improvements The ruling family belongs to the Gohel Rajputs, who are said to have settled here about 1260 under Sajakji, from whose son Ranoji the ruler is descended H H Maharaja Krishna Kumarsinhji Bhausinhji was born in 1912 and succeeded in 1919. He was educated at Harrow. His territory covers an area of 2960 sq. m. The Barton Museum (1895) contains arms, armour, and coins

To visit Junagadh, Somnath, Porbandar, or any places in the W., it is necessary to return to *Dhola junction* (p 229) and change there for Jetalsar *vid* Dhasa.

Jetalsar junction (R), 153 m from Wadhwan. Here the line branches (1) S to *Verával* for *Somnath*, (2) W to *Porbandar* (p 249); and (3) N to *Rajkot*, *Wankaner*, and *Wadhwan* (p 228)

(1) *Jetalsar to Junagadh and Verával*

17 m from Jetalsar is **Junagadh** station (D B K W. of the town), opposite a modern gateway, called the *Reay Gate*, capital and residence of the Nawab, Sir Mahabat Khan III, G C.I.E, K C.S.I (born 1900, succeeded 1911). The name means old fort This Muslim State covers an area of 3337 sq m

From Junagadh branch lines run to Visavadar and Prachi Road. There is also a line W *vid* Bantva between Shapur (a station between Junagadh and Verával) and Saradiya for Kutiana. The Bantva Taluka is owned by Babi Musalmans of the same clan as the Nawabs of Junagadh and Radhanpur

Situated under the Girnar and Datar Hills, **Junagadh** was first ruled by Chavda Rajputs with a capital at Vamansthali (now Vanthali) The Chudasama tribe transferred the capital to Junagadha in 875, and the last of this race was Rah Mandlik III

The fortifications of the present town were all built by the Muslims after the capture of the place by Sultan Mahmud Bigara, of Gujarat, about 1472 He changed the name to Mustafabad and placed it under a Fouzdar The last Fouzdar, Sherkhan Babi, became independent in 1748 and took the title of Nawab Bahadur Khan from the founder of his family, an Afghan, in the reign of Shah Jahan The *Nawab's Old Palace*, containing the Rasaul Khanji Museum (1925), has the Haveli and Darbar Kacheri Hall opposite. In front of the Darbar is a circle of shops with the Aiyena Mahal on the E.

Entering the Reay Gate from the station we come to the Orphanage, and Law Courts, opposite the last is the makbara, or mausoleum, of the Nawabs, adjoining the public mosque At four cross roads lies the old makbara, a highly finished building Fergusson wrote: "There is a cemetery at Junagadh where there exists a group of tombs, all erected within last century, some within the last forty or fifty

years, which exhibit, more nearly than any others I am acquainted with, the forms towards which the style was tending. This style is not without a certain amount of elegance in detail. The tracery of the windows is frequently fascinating from its beauty, and all the carving is executed with precision and appropriateness; but it is all wooden."

Entering the Makbara enclosure by the N gate, the tomb of Nawab Bahadur Khan II. (died 1840) is in front on the left, next to it the tomb of Nawab Hamid Khan II. (died 1851) and on its left that of Laddibu Bibi Beside these is the tomb of Nawab Mahabat Khan I (died 1774) in Saracenic style, and finely carved. The tombs of Bibi Najobibi and her notorious servant, Chaitibu, are to be found at Bara Saiyad in another quarter of the town The tomb of Vizir Sahib Baha-ud-din Bhar has minarets with spiral stairs outside.

Outside the town lies the new suburb containing the Official Residence. The Art College, which was designed and built by a local architect and contains a very fine hall, was opened by Lord Curzon in 1900. Both in and outside the walls many improvements have been carried out during recent years State Departments and Institutions are efficiently housed and managed, and roads have been widened and improved. Separate State guest-houses are maintained for Europeans and Indians of status.

The State Gardens, Moti Bag, Sardar Bag, Lal Bag, the new Diagonal Garden and the Sakar Bag are a great feature of the place. They have recently been restored and laid out and are picturesquely situated The Zoological Collection, including Gir lions successfully bred in captivity, is housed in Sakar Bag, 1 m. to the N. of the State Paddock, where the famous Kathi breed of horses can be inspected with advantage

The soft sandstone which everywhere underlies Junagadh was formed apparently in very shallow water, showing on all sides complicated lines of stratification. The facility with which the stone is worked may be one reason why it has been largely excavated into cave-dwellings in Buddhist times

The Caves —In the N part of the town enclosure, on the way to Dharagadh Gate, is the group of caves called the *Khapra Khodia* These caves appear to have been a monastery, and bear the cognisance of the then ruling race—a winged griffin or lion. They seem to have been two or three storeys high They are excavated in good building stone, and the modern quarrymen have been allowed to encroach and injure them; but they have recently been cleaned out and built up with supporting masonry The most interesting caves of all (which are now protected by an iron gate) are in the Uparkot (p 234) about 50 yds N. of the great mosque They consist of two storeys, the lower chambers being 11 ft. high The upper storey is made up of a tank surrounded by a corridor, and of a room 36 ft. by 28 ft., supported by six columns, beyond which is a small kitchen. From here a winding staircase leads to the lower storey, measuring 39 ft. by 31 ft, with broad recesses all round it, and over them a frieze of chaitya windows Of the columns, Dr Burgess says: "Few bases could be found anywhere to excel in beauty of design and richness of carving those of the six principal pillars"

Inside the Wagheswari Gate are the caves known by the name of *Bawa Piara*—a comparatively modern Hindu ascetic who is said to have resided in them. These caves which date from about the

time of Asoka (272-231 B.C), are among the very oldest in all India, and are nearly all small and plain They are situated in the scarp of a circular detached mass of rock, and face S. and E, a third line to the N., also facing S, being excavated on a higher level than the S line Facing E., a number of caves were dug round a central space

The **Uparkot**, on the E side of the city, now practically deserted, was the citadel of the old Hindu Princes, and is probably the spot from whence Junagadh derives its name The Uparkot is a most interesting old fort The parapets on the E, where the place is commanded by higher ground, have been raised at least three times to give cover against the increasingly long range of projectiles. Here were quartered the lieutenants of the great Asoka, and later of the Gupta Kings The entrance is beyond the town in the W wall, and consists of three gateways, one inside the other The fort walls here are from 60 to 70 ft high, forming a massive cluster of buildings The inner gateway, a beautiful specimen of the Hindu Toran, has been topped by Muslim work The approach is cut through the solid rock. On the ramparts above the gate is an inscription of Mandalika V, dated 1450

About 150 yds. to the left, through a grove of *sitaphal* (custard apples), may be seen a cannon known as the Lilam Top, of bell-metal, 17 ft long, 4 ft. 6 in round at the muzzle, and 6 ft 6 in at the breech, with a bore of 9½ in This gun was brought from Diu, where it was left by the Turks There is an Arabic inscription at the muzzle, which may be translated: "The order to make this cannon, to be used in the service of the Almighty, was given by the Sultan of Arabia and Persia, Sultan Sulaiman, son of Salim Khan. May his triumph be glorified, to punish the enemies of the State and of the Faith, in the capital of Egypt, 1531." At the breech is inscribed "The work of Muhammad, the son of Hamza" Another large cannon called Chudanal, also from Diu, in the S portion of the fort, is 12 ft 8 in. long, 5 ft in circumference at the muzzle, and 5 ft. 7 in at the breech, on which is inscribed, "The work of Ali, son of Jarza" Near this is the **Jami Masjid**, evidently constructed from the materials of a Hindu temple by Mahmud Bigara The mosque is ruined

The **Tomb of Nuri Shah**, close to the mosque, is ornamented with fluted cupolas, and a most peculiar carving over the door There are two **Wells** in the Uparkot—the *Adi Chadi*, said to have been built in ancient times and named after slave girls of the Chudasama rulers, is descended by a long flight of steps (the sides of the descent show the most remarkable overlappings and changes of bed in the strata), and the *Naughan*, cut to a great depth in the soft rock, and with a wonderful circular staircase

There is a fine dharmsala belonging to the goldsmiths near the Wagheswari Gate

Girnar—This mountain is the great feature of Junagadh, and the Jain temples upon it are ancient It is 3666 ft high, and is one of the most remarkable mountains in India From the city of Junagadh only the top of it can be seen, as it has in front of it lower hills, of which Jogniya, or Laso Pawadi, 2527 feet, Lakhshman Tekri, Bensla, 2290 ft. high, and Datar, 2779 ft. high, are the principal. Girnar, which was anciently called Raivata, or Ujjayanta, is sacred amongst the Jains to Neminath, the 22nd Tirthankar, and was, doubt-

GIRNAR

Scale of Miles

0 ½ 1 2 3 4

1. Wagheshwari Gate.
2. Asoka's Stone
3. Bridge.
4. Temple of Damodar
5. ,, ,, Savanath
6. ,, ,, Bhavanath
7. Chadá-ni-wao Well.
8. Wagheshwari Temple
9. Bhairo-Japa.
10. Gaomukhi Temple.
11. Amba Devi Temple
12. Máhparab Kund
13. Datatraya.
14. Hathi pagla Kund
15. Sesáwan Temple.
16. Hanmandhara Kund and Temple
17. Kamandal Temple
18. Sakri ámbli
19. Malbela
20. Suraj Kund.
21. Sarkharia.
22. Bawaha Madhi.

less a place of pilgrimage before the days of Asoka (272-231 B.C.).

The traveller, in order to reach Girnar, passes through the Wagheswari Gate, which is close to the Uparkot. At about 200 yds from the gate, to the right of the road, is the Temple of Wagheswari, which is joined to the road by a causeway about 150 yds. long In front of it is a modern temple, three storeys high, flat-roofed About a furlong beyond this is a stone bridge, and just beyond it, on the right, is the famous **Asoka Stone**, a round boulder of granite, measuring roughly 20 ft. by 30 ft., and inscribed on three sides The inscriptions proved on examination to be (1) fourteen Edicts of Asoka (250 B.C.) in Deva Nagari characters, (2) Rudradaman's (A.D 150) in Sanskrit, and (3) Skandagupta's (A.D.454).[1] Nearly identical inscriptions of Asoka have been found elsewhere

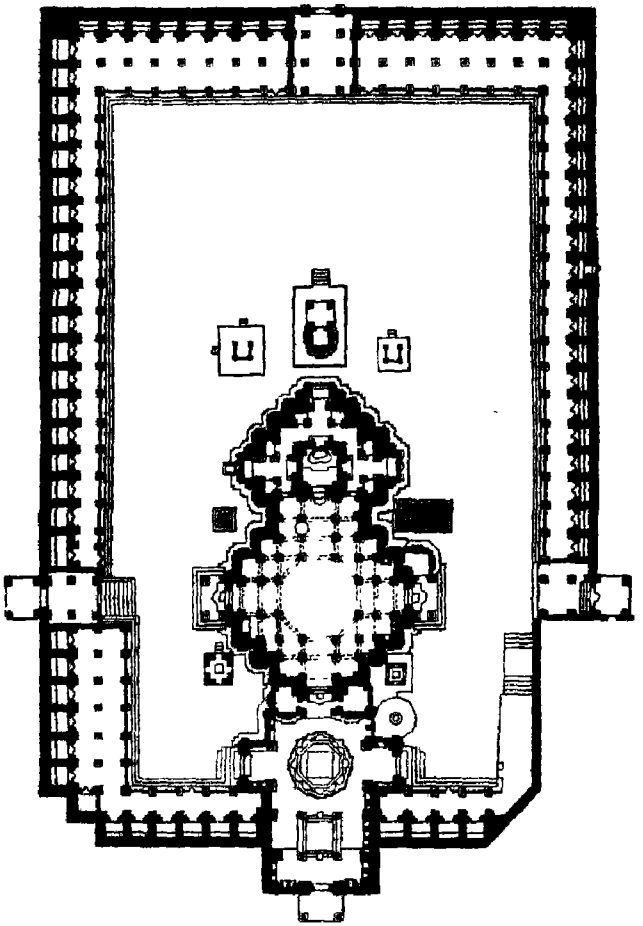
On leaving the Asoka Stone the route crosses the bridge over the Sonarekha river, a fine sheet of water, then passes temples, at first on the left bank of the river and then on the right, where Jogis go about entirely naked, to the largest temple dedicated to Damodar, a name of Krishna, from Dam, a rope, because by tradition his mother in vain attempted to confine him with a rope when a child The reservoir at this place is accounted very sacred The path is now through a wooded valley, with some fine Indian fig-trees Near a cluster of them is an old shrine called **Bhavanath**, a name of Siva, and round it are a number of large monkeys, who come on being called. Persons who are not active climbers can proceed up the mountain in a swing *doli* (p. 230).

A long ridge from the W. culminates in a scarped rock, on the top of which are the temples. Close to the old shrine is a well called the Chadáni-wao The paved way begins just beyond this, and is now continuous from the foot of the hill up the precipice and over the three peaks. The way is paved with dressed granite blocks, with parapets and easy steps The first R H., Chodiaparaba, is reached 480 ft. above the plain, and the second halting-place, at Dholi-deri, 1000 ft. above the plain. From here the ascent becomes more difficult, winding under the face of the precipice to the third R H., 1400 ft. up So far there is nothing very trying to any one with an ordinarily steady brain. But from this point the path turns to the right along the edge of a precipice, which, though improved of late, is still very narrow, the *doli* almost grazes the scarp, which rises perpendicularly 200 ft above the traveller On the right is seen the mountain of *Datar*, with a Muslim mosque on top At about 1500 ft there is a stone dharmsala, and from this there is a fine view of the rock called the *Bhairav-Japa*, "the terrific leap," because devotees used to cast themselves from its top, falling 1000 ft. or more

At 2370 ft. above Junagadh the gate of the enclosure known as the **Deva Kota**, or Ra Khengar's Palace, is reached. On entering the gate the large enclosure of the temples is on the left, while to the right is the old granite temple of *Man Singh*, Bhoja Raja of Cutch, and farther on the much larger one of *Vastupala* (p. 238). Built into the wall on the left of the entrance is an inscription in Sanskrit Some sixteen Jain temples

[1] See *Baroda Arch. Dept. Memorial*, by Hirananda Sastri.

here form a sort of fort on the ledge at the top of the great cliff, but still 600 ft below the summit. The largest temple, of *Neminath* (see plan, below), stands in a colonnade with many images in white marble. Between the outer and inner halls are two shrines. The outer hall has two small raised platforms paved with slabs of



Temple of Neminath, Girnar

quadrangular court 195 ft. by 130 ft. It consists of two halls (with two *mandapams*), and a shrine, with multiple conical spires, which contains a large black image of Neminath, the 22nd Tirthankar, with massive gold ornaments and jewels. Round the shrine is a yellow stone, covered with representations of feet in pairs, which represent the 2452 feet of the first disciples. On the W of this is a porch overhanging the perpendicular scarp. On two of the pillars of the mandapam are inscriptions dated 1275, 1281, and 1278—dates

of restoration, when Dr Burgess says it was covered with a coating of chunam, and "adorned with coats of whitewash" within. The enclosure is nearly surrounded inside by 70 cells, each enshrining a marble image, with a covered passage in front of them lighted by a perforated stone screen. The principal entrance was originally on the E. side of the court, but it is closed, and the entrance from the court in Ra Khengar's Palace is used.

A passage leads into a low, dark temple, with granite pillars. Opposite the entrance is a recess containing two large black images, in the back of the recess is a lion rampant, and over it a crocodile in bas-relief. Behind these figures is a room from which is a descent into a cave, with a large white marble image, an object of veneration by the Jains It has a slight hollow in the shoulder, said to be caused by water dropping from the ear, whence it was called *Amijhera*, "nectar drop." In the N porch are inscriptions which state that in Samwat 1215 (=A D. 1159) certain Thakurs completed the shrine, and built the Temple of Ambika

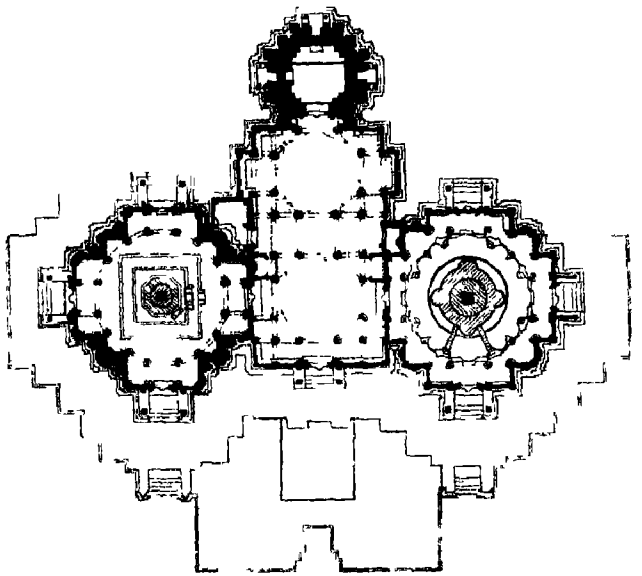
Of three temples to the left, that on the S. side contains a colossal image of Rishabha Deva, the 1st Tirthankar, exactly like that at Satrunjaya, called Bhim-Padam On the throne of this image is a slab of yellow stone carved in 1442, with figures of the 24 Tirthankars Opposite this temple is a modern one to Panchabai. W. of it is a large temple called *Merakvasi*, sacred to Parasnath. N. again of this is another temple of Parasnath, which contains a large white marble image canopied by a cobra, whence it is called *Sheshphani*, an arrangement not unfrequently found in the S., but rare in the N. It bears a date=1803. The last temple to the N. is **Kumarapala's**, which has a long, open portico on the W, restored in 1824 by Hansraja Jetha. These temples are along the W face of the hill, and are all enclosed. Outside, to the N, is the Bhima Kunda, a tank 70 ft. by 50 ft, in which Hindus bathe.

Behind the temple of Neminath is the triple one erected by the brothers **Tejapala** and **Vastupala** (built 1177) The plan is that of three temples joined together The middle shrine has an image of Mallinath, the 19th Tirthankar, the side ones masses representing mountains, Maru and Parusnath N is the temple of **Samprati Raja**, date 1158 Samprati is said to have ruled at Ujjain in the end of the 3rd century B C, and to have been the son of Kunala, Asoka's third son S of this, and 200 ft above the Jain temples, is the *Gaumukha Shrine*, near a plentiful spring of water. From it the crest of the mountain (3330 ft) is reached by a steep flight of stairs Here is an ancient temple of Amba Mata, which is much resorted to by newly-married couples of the Brahman caste The bride and bridegroom have their clothes tied together, and, attended by their male and female relations, adore the goddess and present cocoanuts and other offerings. This pilgrimage is supposed to procure for the couple a long continuance of wedded bliss To the E, not far off, are the three rocky spires of the Gorakhnath, the Neminath or Gúrúdattáraya, and the Kalika peaks.

S E. of the Kalwa Gate of Junagadh is the **Shrine of Jamal Shah**, or **Datar** After passing under a low arch near the city, the house of the Mujawir, or attendant of the shrine, is seen in front. To the right is a stone platform surrounding an unusually fine mango-tree, with a tank just beyond, and the shrine of Datar,

a building 30 ft. high with a fluted cone at top. Here it is necessary for a visitor to take off his shoes

There is a **Leper Asylum** near the Datar Temple for 100 lepers of both sexes, built at the expense of the Wazir Sahib Baha-ud-din H R H Prince Albert Victor laid the foundation-stone in 1890 Above it, 4 m in S F direction,



Temple of Tejapala and Vastupala, Girnar

is the *Datar Peak* (2779 ft.) On the summit of the hill is a small shrine, which commands a beautiful view. The hill is held sacred by Muslims and Hindus alike, and is supposed to have a beneficial effect on lepers, who repair to it in considerable numbers.

67 m from **Jetalsar** is **Verával** * station The railway terminus is on the W, close to the walls, and about ½ m from the light-house at the landing-place. This is a very ancient seaport, and probably owes its existence to its more

celebrated neighbour *Patan Somnath* It rose into notice during the time of the Gujarat Sultans, and in their reigns became, until superseded by Surat, the principal port of embarkation for Muslim pilgrims to Mecca It is still a flourishing seaport.

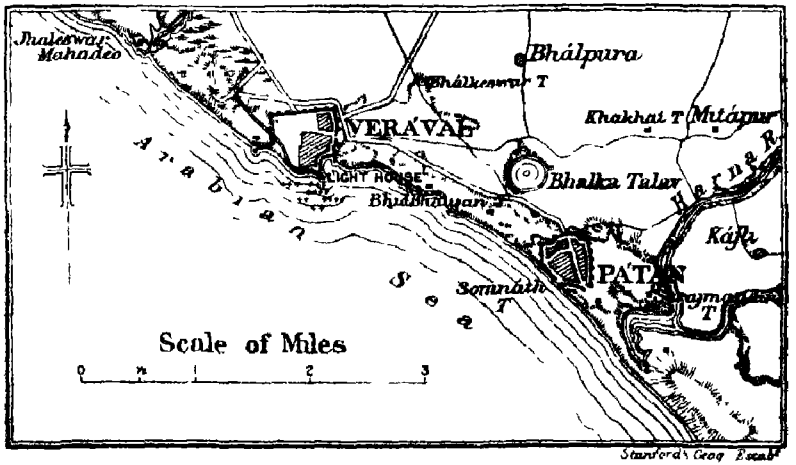
In the Temple *Harsad Mata* a celebrated inscription (1264) records that a mosque was endowed in that year, and bears dates in four different eras. It was from this inscription that it was discovered that the Valabhi era commenced in 319 A.D. and the Sri Singh era from 1113 A.D.

The River Devka, N of Verával, joins the sea at Dani Baru The *Jhdlesvar Temple*, about 2 m N.W. from the town, at the mouth on the right bank, is of great antiquity Half-way to it, on the sand dunes, is the R H of the Junagadh State. On the S.W. face of Verával there is a modern

sea-wall and a stone pier with a lighthouse. Harbour works have been constructed with a breakwater and foreshore pier. A railway connects Verával to Una Delvada (59 m.) A large *Custom House* has been built on the sea face, and near it is a *dock estate*, on reclaimed land.

On the sea-shore, nearly 3 m. to the S E., is **Pátan Somnath** (R H.), also known as Prabhas Pátan, or Deva Pátan, the *Semenat* of Marco Polo. There is a horse tramway

quered the town in 1025 A.D., and it appears that he left behind a Muslim Governor. Subsequently the Hindus recovered their power, but it was again cast down by Alaf Khan (brother of Ala-ud-din Khalji), who invaded Somnath in 1297, when the coast belt or Nagher kingdom was conquered From this date Muslim supremacy prevailed throughout the belt, and from the reign of Muhammad Tughlaq governors were regularly appointed. Through the gallantry



Verával and Pátan

between Verával and Pátan Somnath. The anchorages at Verával and Pátan are so bad that it is hard to account for the undoubted fact that from the earliest times they carried on a trade with the Red Sea, Persian Gulf, and African coast. The place is renowned in Hindu mythology. Here the Jadavs slew each other, and here Krishna, the late legends of whom are connected with Kathiawar as the earlier ones are with Muttra (p. 252), was shot by the Bhil, Jara. In the Gir Forest, inland from Pátan, is the only place in India where there are one or two separate communities of African negroes Mahmud of Ghazni con-

and statesmanship of Diwan Amarji, it was conquered in 1770 by the Nawab of Junagadh, in whose hands it remains

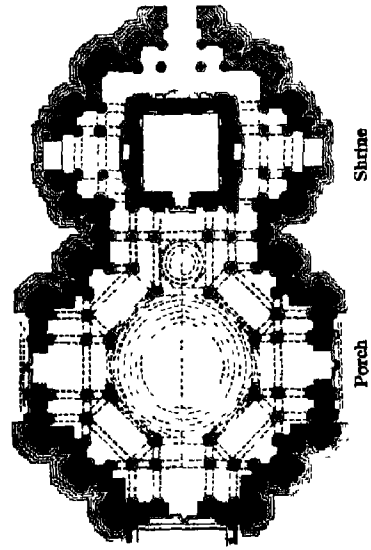
Proceeding from Verával to Pátan, to the right is a vast burial-ground, with thousands of tombs, and *paliás*. The Junagadh, or W. Gate, by which Pátan is entered, is a triple gate of Hindu architecture. The central part of the first division of the gateway is very ancient, and has a carving of two elephants on either side pouring water over Lakshmi, whose figure is almost obliterated

After passing the second gate the W. wall of a mosque of the time of Mahmud is seen on the

left. There is no inscription, but its antiquity is undoubted After passing the third portal of the Junagadh Gate there are four stones on the right hand, of which two have Gujarati, and two Sanskrit inscriptions Driving on straight through the bazar, which is very narrow, and has quaint old houses on either side, the *Jami Masjid* is reached. The entrance is by a porch, which has been a mandir in front of a Hindu temple The most interesting part of this very ancient building is that in each of the four corners is a carving of two human figures with the Bo-tree between them A low door in the W side of the porch leads into the court of the mosque, which was deserted for twenty-five years, and inhabited by Muslim fishermen, who dried their fish in it, but is now used again

To reach the **Old Temple of Somnath** it is necessary to drive to the end of the bazar of Pátan and turn to the right The structure is close to the sea Fergusson considers that it was probably Jain and never large, but that the dome of its porch, which measures 33 ft across, is as large as any of its age and type. Muslims record an image in it, not a lingam. It was, no doubt, surrounded by an enclosure The temple now stands alone, stripped even of its marble. There are three entrances to the porch, and a corridor round the central octagonal space, which was covered by the great dome There are four smaller domes The dome in the centre is supported by eight pillars and eight arches The pillar on the right hand, looking from the E., next but one before reaching the adytum, has an inscription of which the date only, Samwat 1697=1640 A.D., is legible. The walls on the N., S., and W. sides have each two handsomely-carved niches, in which there have been idols.

The temple is said to have been first built of gold by Somraj, then of silver by Ravana, then of wood by Krishna, and then of stone by Bhimdeva. It was destroyed in 1024 by Mahmud of Ghazni and restored by Kumarpal of Anhilpatan in 1169. In 1297 Alaf



Plan of Temple of Somnath, by Dr J Burgess

Khan Khalji (p. 240), destroyed it and again it was rebuilt by Mahipaldev of Wanthi in 1325 After Muzafir Khan's destruction in 1394 it was soon afterwards restored, but in 1706 Aurangzeb ordered its destruction. It has remained a ruin.

The celebrated expedition of Sultan Mahmud of Ghazni to Somnath took place in 1024 A D He marched with such rapidity, by way of Gujarat, that the Hindu Rajas were unable to collect their forces for its defence, and after a sharp fight for two days, he conquered both the city and

the temple. Immense spoil was found in the temple, and after a short stay Mahmud returned to Ghazni. He carried off the famous "Gates of Somnath," of which the supposed originals are now in the fort at Agra (p 269) Sir Henry Elliot records that 10,000 populated villages were held by the temple as an endowment, and that 300 musicians and 500 dancing-girls were attached to it There were also in the time of Mahmud of Ghazni 300 barbers to shave the heads of the pilgrims

The **confluence of the Three rivers** or *Tribeni*, to the E of the town, has been a sacred spot from times of remote antiquity It was near this that, according to tradition, Krishna, sleeping under a deer-skin, was accidentally shot by a Bhil named Jara and killed The road to it passes through the E gate, called the *Nana*, or "small gate," also the *Sangam*, or "confluence gate" It has pilasters on either side, and on the capitals figures are represented issuing out of the mouths of Makaras, fabulous crocodiles which in Hindu mythology are the emblems of the God of Love About ½ m. outside the gate is a pool on the right hand, called the Kund, and a small building on the left, called the Adi Tirth, and next to these is a temple and the Tirth of Tribeni, where people are always bathing The stream here is from 100 yds to 200 yds broad, and runs into the sea. N. of this, about 200 yds off, is the **Suraj Mandir**, or Temple to the Sun, half broken down by Mahmud, standing on high ground, and wondrously old and curious. Over the door of the adytum are groups of figures, with a tree between each two. Inside the adytum is a round red mark for the sun, not ancient; and below is a figure of a goddess, also coloured red. On the W. and S. outer walls are masses of carving much worn At the bottom there is a frieze of *Keshari* lions—that is, lions with elephants' trunks This temple is probably of the same age as that of Somnath About 250 yds to the W is a vast tomb, quite plain; and below, in a sort of quarry, is a subterraneous temple, which is called Ahdi Shah's. The same name is given to a mosque with six cupolas to the N, which has been a Hindu temple

200 yds to the N W, inside the Nana Gate, is a temple built by Ahalya Bai to replace the ancient Somnath Below it is another, reached by descending 22 steps The dome of this subterraneous building is supported by 16 pillars. The temple itself is 13 ft. square.

Returning towards Verával, about ½ m outside the Junagadh Gate, is the Mai Puri, which in ancient times was a temple of the sun The carving of this building is exquisite In the centre of the building is an enclosure 6 ft sq., in which Mai Puri, "the Perfect Mother," is buried A legend states that she brought about the siege of Somnath by Mahmud The temple (or mosque, as the Muslims have made it) contains a mass of old Hindu carving mutilated. On a pillar to the W is an inscription, weathered and illegible Not far from the Mai Puri is the tomb of Silah Shah. To the S.E, about 50 yds., is the tomb of Mangroli Shah, which has been restored Two inscriptions on marble slabs in the W wall give dates 699 A.H. (= A D. 1299) and 1003 A H Before reaching the shrine the visitor passes through the porch of an ancient Hindu temple.

Near this spot is the ***Bhid***

Bhaujan Pagoda on the shore, locally known as Bhidiyo—very old, perhaps of the 14th century. It is 60 ft. high, and forms a good landmark.

Various coasting steamers call at Verával regularly, and the journey can be made by sea to Bombay or to Porbandar, Cutch, or Karachi.

The island of **Diu** (7 m long from E to W and 2 m at its broadest point from N to S) is separated from the S. extremity of the Kathiawar peninsula by a narrow channel. Diu town and fort (constructed in 1536 by the Portuguese) stand at the E. of the island, administered by a governor subordinate to Goa (p 546). Its history has been uneventful since 1670, when it was raided by Arabs from Maskat It was once a port for export of Malwa opium The village of Goghla, on the mainland opposite, is also Portuguese.

(2) *Jetalsar to Porbandar*

(Porbandar State Ry)

9 m **Dhoraji**, an important commercial town Tramway communication to the town

78 m. from Jetalsar is **Porbandar** terminal station (D B.), capital of the State since 1875, and terminus of the Kathiawar-Bombay Air Service H H Maharaja Shri Natvarsinhji Bhavsinhji, a Jethwa Rajput, was born in 1901 and succeeded in 1908. He received full powers in 1920. The area of the State, founded *c.* 1542 after expulsion from Nawanagar, is 642 sq m

Adatiana stone is much used at Bombay. In spite of heavy customs dues and competition, commerce is considerable, including, besides traffic with the Konkan and Malabar coast, a brisk trade with the Persian Gulf, Arabia, and the E coast of Africa. Silk of good quality and cotton cloth are manufactured.

M K. Gandhi was born (1869) a subject of the State

The town is identified with Sudâmapuri, mentioned in the *Bhagavadgita* Near by is an old temple of Sudâma. A goods branch along the shore to the creek W of the town terminates in a wharf. Coasting steamers between Bombay and Karachi touch at Porbandar

The places of interest in the neighbourhood are —

(*a*) *Srinagar*, 7 m NW. of Porbandar, said by Bardic Chronicles to have been the first capital of the Jethwa Rajputs, who claim descent from Hanuman, the faithful ally of Rama, who granted this site to Makardhwaj, son of Hanuman Jethwa is said to be derived from Jethiji, 95th chief in succession There are remains of an ancient temple of the sun

(*b*) *Miani*, a very ancient seaport 18 m N.W of Porbandar.

(*c*) *Chaya*, or Vhhaya, 2 m S E of Porbandar, was capital of the State until 1875. The old Palace is still there.

(*d*) *Bileswar*, 8 m. N of Ranawao station, a small village E. of the Barda Hills There is here a fine temple of considerable antiquity, well preserved

(*e*) *Ghumli*, or *Bhumli*, about 12 m N. of Bileswar, or 24 m. from Porbandar by the road passing W of the Barda Hills, was the second capital of the Jethwa Rajputs. It lies in a gorge, the ruins are of the 11th or 12th century.[1] After the sack of Ghumli the Jethwas retired to Ranpur, and, some time afterwards, were driven to Chaya (above) They acquired Porbandar and Navi from the Mughals. The chief remains are the Lakhota,

[1] Ghumli is illustrated in Dr Burgess's *Second Archæol Rep*

Ganesh Dehra, Rampol, Jeta Wao, the temples near the Son Kansari Tank, and some ruins on the summit of Abapura Hill. It is about 4 m. S of Bhanwar, a fort belonging to the Maharaja Jam Sahib of Nawanagar

40 m S E. from Porbandar is **Madhavapur**, where Krishna is said to have been married There is a temple dedicated to him

(3) *Jetalsar to Rajkot, Wankaner, and Wadhwan*

(Gondal State Ry)

23 m **Gondal** (Guest House, D B.) is the capital of the Gondal State. The late Maharaja, Sir Bhagwatsinhji Sagramji, G C S I , G.C I.E , a Jadeja Rajput, and therefore of the Lunar family, tracing his descent to Shri Krishna, born in 1865, succeeded in 1869, and died 1944 He received full powers in 1884, after completing his education at Edinburgh, where he took the degrees of M.D and F.R.C.P. He was also a D.C L of Oxford and LL D of Edinburgh. There are no taxes or customs or octroi

The founder, Kumbhoji I , son of Meramanji I of Sardhar, received Ardoi in 1634 and expanded his possessions. Sagramji I , his successor, obtained Gondal from the Subahdar of Junagadh in return for help against Kusbatis, Muslim marauders. The capital was moved here in 1653. Gondal has always been notable for the vigour of its public works It has a College for the sons of Girassias (Rajput landholders) who cannot afford the Rajkumar College at Rajkot. The town also contains the Bai Sahib Asylum, the Bhagwatsinhji Orphanage, a Girls' High School, and waterworks for irrigation and water supply. The State covers an area of 1024 sq. m.

47 m. **Rajkot** station (D.B.K. ; alt. 404 ft ; aerodrome), a civil station rented from the Thakur. It is also the capital of a State which covers an area of 282 sq. m. The Thakur Sahib, Shri Dharmendra Sinhji, a Jadeja Rajput, was born in 1910, and succeeded his father, Sir Lakhaji Raj, K C S.I., in February 1930. He is descended from the same ancestor as the Jam of Nawanagar, Jam Sataji, who died in 1608 Jadeji Shri Vibhoji, either the son or grandson of Sataji, founded Rajkot State

The most important public work in Rajkot is the *Kaisar-i-Hind Bridge* over the Aji River, built by Mr R. B Booth, whose name is connected with nearly every important modern building in the Agency The total cost of the bridge was Rs 117,500, of which the late Maharaja of Bhaunagar paid all but Rs 7500

At the *Rajkumar College* the young Princes of Kathiawar, Gujarat, and other Agencies are educated, also (since 1938) sons of Indian gentlemen. Founded by Colonel R H Keatinge, V C., it was opened in 1870 On the ground floor is a fine hall, surrounded by class-rooms Over the E entrance is a rectangular tower 55 ft. high The entrance on the W is flanked by two circular towers The N and S wings contain forty suites of bedrooms and sitting-rooms. To the W. of the N. wing is a chemical laboratory, and on the opposite side are a gymnasium and racquet-court. N. of the laboratory are stables. The young Princes are drilled as a troop of cavalry. W. of the quadrangle are the houses of the Principal and Vice-Principal. S. of the buildings is the cricket-field of 19 acres.

Other features are the Ranjitsinhji Swimming-bath and the Hide Sanatorium. The late Maharaja of Bhaunagar, who was educated at the College, presented a lakh of rupees for the building of the Principal's residence and one of the wings, and contributed a further sum of Rs 50,000 to the Endowment Fund.

The *High School* was opened in January 1875 It was built at the expense of the Nawab of Junagadh, and cost Rs.70,000. In the centre is a fine hall. The *Barton Women's College* is another useful institution.

In Rajkot Civil Station are the Jubilee Gardens, containing the Memorial Institute It comprises (1) the Lang Library, (2) the Connaught Hall, which is used for public meetings and official Darbars; and (3) the Watson Museum (1888)—a collection of antiquities, products, and manufactures of Kathiawar. The Connaught Hall contains a statue of Her Majesty Queen Victoria, and portraits of the late Duke of Clarence and the leading Chiefs of Kathiawar

N.E. of Rajkot there are (1) the *Victoria Jubilee Waterworks*, for the Civil Station, and (2) the Lalpuri Irrigation Works, for the Rajkot city, with irrigation canals

The Kathiawar Mail of the B.B and C.I. Ry. continues from Rajkot to (51 m) Jamnagar, and thence (138 m.) to Dwarka (603 m. from Bombay) over the Jamnagar-Dwarka Ry., which has its terminus (156 m.) at **Port Okha**, with berths for two large steamers

Jamnagar, or Nawanagar (aerodrome), is the capital of the State of which the famous cricketer, Lt.-Col. H H Maharaja Jam Shri Sir Ranjitsinhji, G C.S I, G B E, was ruler from 1907 to 1933. The present ruler, Col. H.H. Maharaja Jam Shri Sir Digvijaysinhji Ranjitsinhji, G.C.I.E., K.C.S.I., A D C. to the King, born 1895, was a member of the War Cabinet (1942). His Highness, a Jadeja Rajput, is entitled to a permanent salute of 13 guns Marble is found in the Kandorna and Bhanvad Mahals, copper in the Khambhalia Mahal There is also a pearl fishery lying off the coast of the S shore of the Cutch Gulf. The Jamnagar dyers are well known, and the town is famous for silken and gold embroidery The Kotha Bastion and Lakhota are sights, also the new palace constructed by the late Maharaja, approached by a causeway, with a solarium for radium treatment Small steamers occasionally ply between Bombay and Bedi harbour, near Nawanagar Bandar Bala-chadi is a seaside resort.

The temples at **Dwarka** ("door") and **Bet** ("island"), in the extreme N.W. of Kathiawar, are in the district of **Okhamandal**, since 1817 part of the territory of the Gaekwar of Baroda. They are very sacred *Hindu Temples* Dwarka was the capital of Krishna, who founded it after his flight from Mathura (p. 249), when attacked by Jarasandha, the King of Magadha It ranks as one of the Great Seven places of pilgrimage, with Benares, Muttra, Hardwar, Ajudhia (in Oudh), Ujjain, and Conjeeveram (in S. India). The temple of Dwarkanath (a title of Krishna) is believed to have been raised in a single night.

Bet island is associated with Vishnu, who is said to have destroyed a demon named Sankhasun here, and to have turned the demon's wife, Tulsi, into the basil plant, which is so called The temple is dedicated to Satiya Bhimaji, consort of Khrishna

The original possessors of Okhamandal were a war-like tribe of Rajputs, called "*Waghir*," notorious pirates Though reduced

(1820) by the British Government, they still cling to their former traditions, by which each man believes that he is a rightful Prince. The B.I. mail steamers from Bombay to Karachi call between September and May at Dwarka and Port Okha.

The return journey to Ahmadabad is made from Rajkot, whence the *Morvi State Railway* (a metre-gauge line) runs N.E. to **Wankaner** junction (26 m). This is the capital of a small State (417 sq m) The present Raj Sahib, Sir Amarsinhji Banesinhji, K C I E, who is a Jhala Rajput, was born in 1875 and succeeded in 1881, he received full powers in 1899. The country around rises into hills W. and S

From Wankaner there is a branch (16 m.) N to **Morvi**, the capital of the State (822 sq m) Originally a Jethwa Rajput State, it was conquered by the Muslim King of Gujarat, Sultan Muzafir, who granted it to a relative of the Jam of Nawanagar Khengarji, who saved the King from a tiger when out hunting. The Maharaja, H H Sir Lakhdirji Waghji, K.C S I, a Jadeja Rajput, was born in 1876 and succeeded in 1922

The main line runs E. to (47 m.) **Wadhwan** and (88 m) Viramgam (see p. 227) A chord line runs (41 m) to Mehsana (see p 206) for Ajmer and Delhi

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ROUTE 12.

BARODA by B B C I Ry. (broad-gauge), to **Champaner Road** (for **Champaner** and **Pavagadh**), **Bayana** (junction for Agra), **Bharatpur**, MUTTRA, and thence to DELHI

The B B C I Ry "Frontier Mail" from Bombay turns E on the broad-gauge chord, opened 1903, from **Baroda** (p 194, Route 10), to

267 m. from Bombay, **Champaner Road** stn N G ry. (31 m) to the Pani Mines. The fortified hill of Pavagadh, at the foot of which lies the ruined city of **Champaner**, stands out from the plain of Gujarat and is visible for many miles The hill is about 1 m. from the Pavagadh station on the N G. ry The summit is about 2700 ft. above sea-level and the ascent may be made on foot (2 hrs) or in dhoolies It is an all-day trip. D B at Halol stn. (7 m from Champaner Road), 5 m off, there is no arrangement for travellers to stop the night at Pavagadh.

Champaner was the ancient fortress-city of local Rajput Kings After many vicissitudes it was taken, in 1484, by **Mahmud Bigara**, of Ahmadabad, who made it his capital. In 1535 it was besieged by Humayun, Emperor of Delhi, who, with a small party which he led in person, scaled the precipices of the fort by the aid of iron spikes driven into the rock, and opened the gate to admit his army. There are remains of many mosques, tombs, and tanks in the lower city; and in the forest for miles around, the ruins of massive walls, minarets, and palaces testify

to the former greatness of Champaner [1]

The Jami Masjid has been restored by the Archæological Department, and has eleven domes The Borah Masjid is also well worth a visit The height and strength of the part of the city wall which remains standing give an idea of the importance of the city

In the ascent of **Pavagadh** there are interesting ruins at the Medi and Medi Talao. Other ruins are the Buria Durwaza, the Champavati or Champa Ranina Mahal, which is a sort of summer-house in three storeys abutting on the hill, the fortifications near the Machhi Haveli, which is half-way up, and the gate and fortifications higher up. There is a temple of Bhawani on the summit, which is surmounted by a shrine of Sadan Shah, a Muslim saint This shrine is built on the spire of the Hindu temple, the top of which has been removed to make room for it—a curious arrangement, which is supposed to represent the triumph of Muslim conquerors over the Rajput Chiefs

289 m. from Bombay **Godhra,** headquarters of the Panch Mahals district of the Bombay Presidency N G Ry, 26 m., to Lunawada, chief town of a State B G. branch, 49 m, to Anand on the main line between Baroda and Ahmadabad (Route 10, p 196).

334 m. **Dohad,** contains the tomb of Mahmud II., Khilji of Mandu, executed (1526) by Bahadur Shah of Gujarat

384 m Mahi river, bridge 1100 ft. long.

404 m. **Ratlam,** (D B,K), capital of the State (p. 151). Junction for the metre-gauge line from Khandwa to Ajmer (Route 8)

[1] For the architecture of Champaner, see Burgess's *Mohammedan Architecture of Gujarat* (1896).

429 m. **Chambal river,** bridge 1000 ft. long (1896).

430 m **Nagda.** Branch line (broad-gauge, opened 1896) of the G I.P. Ry. to Ujjain and Bhopal (Route 9)

From Nagda the main line (opened 1909) of the B B,C.I Ry. turns N and runs to 518 m **Sri Chatrapur,** 17 m. from **Jhalra Patan** Both these towns are in the State of Jhalawar, separated from Kotah in 1838 The ruling Chief, Lieut H H. Maharaj Rana Shri Rajendra Singh, was born in 1900 and succeeded in 1929, the Jhala clan of Rajputs, to which he belongs, claims descent from the Solar race Baroli, N.W., and the Dhamnar caves, S W, may be visited

At 540 m **Darah,** the line passes through the famous Mukand Dwara Pass, from which Colonel Monson made his disastrous retreat in the summer of 1804 before Jaswant Rao Holkar, the scenery here is striking, the railway is on a viaduct

570 m. Kotah Jn **Kotah** (alt. 824 ft.) is the capital of the Kotah State, separated from Bundi (p 159) in 1572 The Ruling Prince, Lt -Col H H Maharao Sir Umed Singh Bahadur, G C I.E., G.C.S.I., G B.E , was born in 1873 and succeeded in 1889 His Highness is a Rajput of the Hara sept of the Chauhan clan, and is entitled to a permanent salute of 17 guns and a personal salute of two extra guns. The area of the State is 5684 sq. m. In 1857 the State troops and the Kotah Contingent mutinied and murdered Capt. Burton, the Resident, and his two sons

Kotah is situated on the right bank of the Chambal; the fine old palace and the royal cenotaphs lie S. of it The new palace is

called the Umed Bhawan. There is a fine General Hospital in the city; also a Hospital for Women, named after Queen Victoria Other public buildings of interest are the Crosthwaite Institute, situated in the Public Gardens; the Herbert High School; the Curzon Wyllie Memorial, and the Girls' School. The lake above the gardens should be seen There is a well-furnished and comfortable D.B. at Kotah about 3 m. from the railway station.

A branch (broad-gauge) of the G.I.P. Ry. runs from Kotah, 188 m., to Bina jn. (p. 168), through (114 m.) Goona, a Cantonment of the Central India Horse until 1924. The last lion in Central India was shot here (1874)

575 m the railway crosses the Chambal river again, on a bridge 1652 ft. long (1909).

N. of Kotah the main line of the B.B.C.I. Ry. passes, 637 m., Sawai Madhupur (metre-gauge line N.W to Sanganer, p 223). Nawai (41 m) is the station for Tonk, across the Banas river. Amirgarh Fort was built by Amir Khan

704 m., Hindaun, in the Jaipur State, once a place of importance, but devastated by the Mahrattas

724 m. from Bombay **Bayana** (Biana) on the bank of the Gambhir River, once a famous city, near which Babar defeated the Sanga Rana (Sangram Singh) of Chitorgarh on 16th March 1527, after sustaining a severe check from this Prince in the previous month; it was from Babar's victory that Sikri received the name of Fatehpur The Rana, who was the bravest Hindu warrior of his day, refused to return as a defeated Chief to Chitor. Bayana, in Bharatpur State, was first invaded by Muhammad Ghori in 1196 A.D. Shortly afterwards it passed back into the hands of the Hindus, but was reconquered by Altamsh in 1235 A.D. It was visited by Akbar in 1601, and the mother of Jahangir planted a garden there, a fine gateway of which still exists. Muslim buildings are numerous

Broad-gauge branch, 47 m, to Fatehpur Sikri and **Agra Fort** stn (Route 13).

750 m. from Bombay is **Bharatpur Junction** (D.B., outside Muttra Gate). A metre-gauge line of the B B.C.I Ry from Bandikui Jn. to Agra Fort meets the main broad-gauge line to Delhi here. Bharatpur, or Bhurtpore, is the capital of a Jat State which extends over an area of 1993 sq m The Maharaja, H H. Sri Brijendra Singh, Bahadur Jang, was born in 1918, succeeded his father in March 1929, and received full powers 1939 His palace is at Golbagh, about 1 m outside the city

The family is descended from a Jat Zamindar, Churaman, who harassed the rear of Aurangzeb's army during his expedition to the Deccan He was succeeded by his brother, and (1720) by his nephew, the famous Suraj Mal, who fixed his capital at Bharatpur (1733), and subsequently (1761) drove out the Mahratta Governor from Agra, which he made his own residence In 1765 the Jats were repelled before Delhi and driven out of Agra. In 1782 Scindia seized Bharatpur and its territory, but he restored fourteen districts, and when he fell into difficulties (1787) formed an alliance with Ranjit Singh (who ruled between 1763 and 1805) The Jats, however, were defeated by Ghulam Kadir at Fatehpur-Sikri, and

were driven back on Bharatpur, but being reinforced at the end of the same year, 1788, they raised the blockade of Agra, and Scindia recovered it. In 1803 the British Government concluded a treaty with Ranjit Singh, who joined General Lake at Agra with 5000 horse, and received territory in return. Upon Ranjit Singh supporting Jaswant Rao Holkar, in 1804, Bharatpur was besieged by General Lake, but four assaults on the fort were repulsed with a loss of 3000 men The Chief then made overtures for peace, which were ratified on the 4th of May 1805. He died in that year.

On a dispute about the succession, Bharatpur was besieged by General Lord Combermere, with 21,000 men and 112 siege guns, converging from Agra and Muttra, and on the 18th of January 1826, after a siege of three weeks, the place was stormed Approaches were opened against a ravelin near the old Jagina gate and a bastion on the S E The breach was made by an explosion of mines The treasure taken amounted to 48 lakhs of rupees, of which Lord Combermere took six lakhs as his share. The fortress was then dismantled

The Walled City of Bharatpur is an irregular oblong, lying N E. and S W. The **Inner Fort**, surrounded by a ditch and a lofty mud wall, is contained in the N.E. half of the outer fort Three Palaces run right across the centre of the inner fort from E. to W., that to the E. being the Raja's Palace. Next is an old Palace built by Badan Singh. To the W. is a Palace generally styled the Kamra.

There are only two gates to the inner fort—the Chauburj Gate on the S., and the Assaldati on the N. The fine bastion at the N.W corner of the inner fort is called the *Jowahar Burj*, and is worth ascending for the view. N. of the Kamra Palace is the Court of Justice and the Jewel Office. On the road between the Chauburj Gate of the inner fort and the Anah Gate of the outer fort are the Gangaka Mandir and the Laksmanji Temple.

A *chhattri* erected by the late Maharaja in the *Victoria Park Gardens*, in memory of General Sir James Willcocks, who died here in December 1926, was unveiled by Lord Birdwood (1928). A great marsh, the "Ganna," 2 m. N.W. of the city, is famous for the annual duck-shooting, very strictly preserved. Bharatpur is the headquarters of the Political Agent for the Eastern States of Rajputana (Bharatpur, Dholpur, Bundi, Kotah, Jhalawar, and Karauli)

771 m from Bombay by the B B C.I Ry. broad-gauge route is **MUTTRA** (or Mathura) The modern town of Muttra, on the right bank of the Jumna, comprises a Municipality in which the City and Civil Lines are included, and a Cantonment (D.B.). The city lies to the N. of the municipal area S of this comes the Cantonment, and to the S of the Cantonment and interlaced with it are the Civil Lines. All are linked up by the main Agra-Delhi Road.

In the Civil Lines are situated the Collectorate Court (*kachahri*), the Civil Law Courts, and other public offices, the Jail, the P.W. Inspection Bungalow, the Club, the Cantonment Post Office and the residences of the Civil Officials

Outside the city proper the other places of interest are the Headquarters Hospital, erected mainly at the cost of Goswami Sri Gobardhan Lalji, the high priest of the Nathdwara temple in Udaipur, in memory of his pilgrimage to Muttra in 1912; the Victoria Memorial; the Dampier Park and the Museum (p. 250). All these places lie on the main Agra-

Delhi Road between the city and Cantonments. The city has, since 1917, been equipped with a water-works installation, the pumping station for which is situated at Laldiggi, not far from Potara-Kund (see p. 253) on the Muttra-Gobardhan Road

In **Cantonments** are situated the D.B. (small and of an indifferent character) and the three Churches, Anglican, Roman Catholic and Nonconformist. The Anglican Church contains a few interesting tablets; the Roman Catholic Church was constructed by Mr Growse (a Collector, and author of the Mathura Gazetteer) in an attempt to combine features of both Western and Oriental architecture The cemetery, which is just behind the D B, contains monuments to the memory of Major-General Frazer of the 11th Regiment of Foot and other officers, who fell at the Battle of Dig in 1804 Not far from the cemetery is the tomb of Lt P H C Burlton of the 67th Bengal Infantry, who was shot by his detachment, sent here from Agra, which mutinied on the 30th May 1857.

Railways.—Muttra is served by three railway lines. The G.I P main line from Bombay, 868 m, through Jhansi, Gwalior, and Agra Cant to Delhi, the B B and C.I. broad-gauge from Bombay, 771 m., *vid* Nagda, and the B.B and C.I metre-gauge, 259 m from Agra Fort *vid* Achnera to Cawnpore, which crosses the Jumna by a bridge 1146 ft long (1880). This connects with the E.I.R. syatem at Hathras Road Junction, 30 m. from Muttra All three lines converge at the Junction Station, which is the principal station, situated about 2 m. from Cantonments and the city, and equipped with ample waiting-room accommodation and refreshment-rooms. The small Cantonment Station (B.B. C.I. metre-gauge), about half-way between the city and Civil Lines, is used mainly by passengers proceeding to or arriving from the E. There is a small waiting-room. Masani Station (formerly the City Station) is on a branch metre-gauge line from Muttra to Brindaban, and is only used by pilgrims travelling between these two places.

Roads.—The Cantonments and Civil Lines are well laid out with the usual broad roads and avenues of trees In the city the roads are extremely narrow

Motorists proceeding from Agra to Delhi or Brindaban who do not wish to pass through the city, should take the Delhi Branch road, which leaves the Agra-Delhi main road just South of the quarterguard in Cantonments, and, skirting the city, rejoins it outside the Shahganj Gate near the Masani Station From Muttra there radiate metalled roads to Delhi (98 m), to Brindaban (6 m.), to Bharatpur (25 m); to Dig (24 m), to Agra (35 m); to Hathras (25 m) The road to Hathras crosses the Jumna on the B B C I metre-gauge railway bridge. About 2 m. E of the railway bridge another metalled road branches off leading to Gokul, Mahaban, Baldeo and thence to Sadabad and the Etah district A third branches off from Raya to Motijhil *vid* Mat

The **Curzon Museum of Archæology** in Dampier Park, which was opened in January 1933, contains a collection of Mauryan, Sunga, Kushan, Jain and Brahman objects found in the Muttra district. Of octagonal shape, it has replaced an old building erected by public subscription at the instance of Mr Mark Thornhill, as a R H. for Indians of rank

near the Courts, converted into a museum (1874) by Mr Growse, who placed in it the sculptures excavated by himself from various mounds in the neighbourhood of the city of Muttra Considerable additions were made by the honorary curator, Rai Bahadur Pandit Radha Krishna. The present arrangement of the collection is due to the superintendence of the Archæological Section of the Indian Museum at Calcutta Among the sculptures of Mr Growse are the Bacchanalian group of Pali Khera, remarkable for its pronounced classical inspiration, and the exquisitely-carved standing Buddha image of the 5th century A D , which was unearthed on the site of the Buddhist monastery founded by King Huvishka, now occupied by the Collector's court-house.

Among later acquisitions are the colossal statue from the village of Parkham, which belongs to the 2nd century B.C., and is one of the oldest detached images found in Indian soil; and the image of a Nâga, or serpent god, of the reign of Huvishka (A D. 162-82), which Rai Bahadur Pandit Radha Krishna, Honorary Curator (d. 1931), obtained from the village of Chhargaon. Two pillars are worthy of notice. An inscription upon one of them, engraved in the Gupta year 61 (A.D. 380-381) during the reign of Chandragupta III., gives the earliest date upon which he has been proved to have been on the throne. On the other, the inscription supplies the earliest date (the year 28) yet known of the reign of the Kushan King Huvishka who was apparently then ruling conjointly with his brother Vasishka, while their father, the great Kanishka, was campaigning beyond the mountains.[1] There is also a sacrificial post (*Yupa*) erected by a Brahman in the reign of Vasishka (year 24). Of Kanishka there is a life-size statue, which shows the King's costume and weapons The head has been lost Together with this, two other images were found, one of colossal size, which also must represent Princes of the Kushan dynasty

[1] V. A Smith, *Early Hist. Ind.*, p. 286.

Sport — Black buck, chinkara and small game abound in the neighbourhood about 200 boars are speared yearly by the Muttra Tent Club in the bed of the Jumna

History.—The site is of great antiquity, and has been inhabited from at least 600 B C The earliest town appears to have been farther back from the river towards the modern village of Maholi, but in the course of centuries the city has gradually moved nearer the Jumna, which may have altered its course Muttra is referred to by Ptolemy as *Μόδουρα ἡ τῶν Θεῶν* and was a great Buddhist stronghold in the Buddhist period.

Fa Hian (A D 401-410) found 20 Buddhist monasteries with 3000 monks at Muttra: but when Hiuen Tsang visited the place in A.D 634, the number had declined to 2000. Buddhism had disappeared when Mahmud of Ghazni came to Muttra in A.D. 1017. He pillaged and burned the city, and carried off five golden idols, whose eyes were of rubies, worth 50,000 dinars = £25,000 A sixth idol of gold weighed 1120 lbs., and was decorated with a sapphire weighing 300 *Mishkals*, or 3¾ lbs. There were also 100 idols of silver, each of which loaded a camel, weighing, say, 400 lbs. apiece The idols together were worth not less than £3,000,000 The Brahman temple of Kesava Deo was built on the site where the great Buddhist monastery, Yasa Vihara, stood.

Muttra was attacked by Sikandar Lodi in 1500, and great harm was done to the shrines and temples

The Fort, rebuilt in Akbar's time, was in the centre, but only the substructure now remains. During his tolerant reign and that of his son Jahangir, Muttra again began to flourish, but the present city dates from the time of Abdun Nabi—one of Aurangzeb's Governors (1660-1668) He was killed in a local revolt, which Aurangzeb utilised as a pretext for demolishing all the chief temples in the town, including the Kesava Deo temple

With the break-up of the Mughal Empire, troublous times ensued. Lying on the high roads between Delhi and Agra, Muttra became the cockpit of the fighting that took place between the later Mughals, the Jats and Mahrattas It was the favourite residence of Madhava Rao Scindia

The Mutiny of 1857.—The district and city of Muttra came into the possession of the British as the result of Lord Lake's famous campaign, 1803-1805, and, with the exception of the operations undertaken in 1825 against Bharatpur, enjoyed a period of undisturbed peace up to the outbreak of the mutiny On receipt of the information, the ladies and non-combatants were sent off immediately to Agra, and it was proposed to send all the treasure from Muttra to that station also. The detachment of the 44th and 67th regiments of Bengal Infantry that had been sent for from Agra to escort the treasure, mutinied, shot their Officer-Commanding, Lt. Burlton, and marched off towards Delhi, after setting fire to all the bungalows and offices, and releasing the prisoners in the jail. Prior to this outbreak Mr Mark Thornhill, the Magistrate of the district, had proceeded in the direction of Delhi, with Captain Nixon, who was in charge of the Bharatpur army. They had got as far as Hodal on the way to Delhi, when Mr Thornhill returned with a detachment to take measures to put down local disturbances. While he was at Chhata (25 m. N.) the news of the pillage of the Treasury was brought to him. The party, including engineers surveying for the East Indian Railway, rejoined Captain Nixon at Hodal and prepared to intercept the mutinous treasury-guard. The Bharatpur forces, however, mutinied; and the Europeans with them were forced to seek safety in flight. Captain Nixon and others decided to proceed to the army before Delhi, while Mr Thornhill and his head clerk returned in the direction of Muttra, but eventually pushed on to Agra After a short time Mr Thornhill returned to Muttra with a small body of volunteers and attempted to restore order, but the task proved too great, and they were obliged to return to Agra. Peace was gradually restored after the relief of Agra by Greathed in October 1857 Throughout the rebellion the great banking firm, still existing, known as the Seths of Muttra, displayed most conspicuous loyalty, and they and the Raja of Hathras received substantial rewards in the shape of confiscated villages

Religious Associations—The abiding interest of Muttra lies in its religious associations. Not only the town itself, but the greater part of the district, known as Braja Mandal, commands the reverence and respect of Hindus. It is studded with places of pilgrimage, connected with the Krishna legend, and is visited throughout the year by devout crowds of pilgrims. In the rainy season, large bands, under the guidance of their religious leaders, perambulate the district, perform-

ing the "Banjatra," or "pilgrimage of the groves" (of which there are 12 main and 24 subsidiary), and acting the main scenes in the life of Krishna at the localities connected by legend with them

The chief places of pilgrimage are Muttra city itself, Brindaban, Mahaban with Gokul, Baldeo, Gobardhan and Radha Kund, and Barsana.

Muttra City. The city is entered by the Hardinge Gate, also called the Holi Gate, built by the Municipality The finely-carved stonework façades of the better class of houses are well worthy of inspection

In the centre of the town, on an isolated site, rises the **Jami Masjid**, built by Abd-un-nabi, once covered with encaustic tiles; its court is 14 ft above the level of the street. On either side of the façade of the gateway are Persian lines. The chronogram gives the date 1660-1661 Over the façade of the mosque proper are the 99 names of God. At the sides are two pavilions roofed in the Hindu manner. There are four minarets, which are 132 ft high About ¼ m. beyond is the **Katra**, which is an enclosure like that of a sarai, 804 ft. long by 653 ft broad Upon a terrace 30 ft. high stands a great red stone mosque, built by Aurangzeb, and used as an **Idgah**, and the most conspicuous object in a distant view of Muttra. This mosque was raised on the ruins of the Kesava Deo Temple, which was destroyed by Aurangzeb, and which, shortly before its destruction, was seen by the travellers Bernier, Tavernier, and Manucci. The foundations of the temple are plainly traceable at the back of the mosque. The Brahmanical temple of Kesava Deo was built on the ruins of a large Buddhist monastery, which, as appears from inscriptions found here, dated back to the Kushan period, and still existed in the days of the Gupta Emperors. The earliest Buddhist inscriptions found here may be assigned to the beginning of the Christian era, and one of the latest contains the genealogy of the Gupta dynasty, down to Samudra-Gupta (A D 330-375). A Buddha image, extracted by General Cunningham from a well in 1862, and now preserved in the Lucknow Museum, mentions the *Yasá-vihara* (p 251). The inscription is dated in the Gupta year 230 (A D. 549-50)

At the back of the Katra is a modern temple to Kesava, built by Bir Singh Deo of Orccha, and close by is the **Potara-Kund**, a tank in which Krishna's baby linen was washed. This tank is faced with red sand-stone, and has flights of stone steps down to the water. There is also a very steep ramp for horses and cattle.

The River and Ghats.—The Jumna in winter is about 300 yds. broad A paved street runs the whole way along it, with bathing ghats, descending to the water, and ornamental chabutras, or platforms, and small pavilions

The *Arati* ceremony, or worship of the sacred river, takes place about dusk at the **Vishant Ghat**, when cows, monkeys, and turtles are fed. The most convenient way of seeing the ceremony is to take a boat.

The river is full of turtles, some of them very large, which put their long necks and heads out to be fed About 80 yds N of the bridge is the fine **House** of the **Guru Parshotamdas**. Then comes another belonging to a Gujarati merchant, **Ballamdas** N. again is a slender quadrangular tower of red sandstone, 55 ft high, known as the **Sati Burj**. The upper part is said to have been destroyed by Aurang-

zeb, and the plastered dome is modern. According to Mr Growse it was built (after 1574) to commemorate the *sati* of a wife of Raja Bhar Mal, of Ambèr, by her son, Bhagwan Das (p. 220). The traveller now descends several steps to the Visrant Ghat, a little N. of the Sati Burj, and so to a sort of square, where Rajas are weighed against gold There is a small white marble arch here, close to the river Beyond this is a ghat built by Maharaja Jai Singh, of Jaipur, and the enormous house and temple of the late Seth Lakshman Das The observatory of Jai Singh (p 93) has gone.

Mahaban is about 6 m. S E of Muttra, on the left bank of the Jumna, and is reached by a good road across the railway bridge. It is a very ancient town and place of pilgrimage, and in the year A D 1017 shared the fate of Muttra, and was sacked by Mahmud of Ghazni. The Hindu Raja is said to have solemnly slain his wife and children and then committed suicide In 1234 Mahaban is mentioned as one of the gathering places of the army sent by Shams-ud-din Altamsh against Kalinjar It is also mentioned in his diary by Babar in 1526

The surrounding country, although now bare of woods, appears to have been once literally *Mahaban*, " a great forest " Even as late as 1634, the Emperor Shah Jahan held a hunt here, and killed four tigers. This ancient woodland country fringing the sacred Jumna is the scene of very early religious legends. In Sanskrit literature it is closely associated with Gokul, about a mile off, overhanging the Jumna. Indeed, the scenes of the youthful adventures of Krishna, actually shown at Mahaban, about a mile from the river, are ascribed in the Puranas to Gokul. Gokul seems to have been originally the common name for the whole, although it is now restricted to what must have been a waterside suburb

The ruins of Mahaban, a hill of brick and mud covering about 30 acres, are on the site of an old fort built by Rana Katira of Mewar. The architectural remains combine Buddhist and Hindu forms Mahaban is celebrated as the place where in his infancy Krishna was brought by his nurse and exchanged with the newly-born daughter of Jasoda, wife of Nanda, to save him from death, at the hands of Krishna's uncle, the giant Kans. This recalls the story of Herod.

The **so-called Palace of Nanda, foster-father of the** changeling **Krishna,** consists of a covered court, re-erected by Muslims in the time of Aurangzeb as a mosque, and is divided into 4 aisles by 5 rows of 16 pillars, 80 in all, from which it takes its popular name of Assi Khamba, or the " Eighty Pillars." Many of the capitals are curiously carved with grotesque heads and squat figures Four of them are supposed to represent by their sculptures the four ages of the world. The pillar known as the Satya Yug, or " Golden Age," is covered with rich and beautiful carving, that known as the Treta Yug, or " Second Age " of the world, is adorned with almost equal profusion The Dwapar Yug, or " Third Age," is more scantily carved ; while the Kali Yug, or present " Iron Age " of the world, is represented by a crude unsculptured pillar.

In the Palace of Nanda are laid

the scenes of Krishna's infancy. His cradle, a rough structure covered with red calico and tinsel, still stands in the pillared hall, while a blue-black image of the sacred child looks out from under a canopy against the wall The churn in which Krishna's foster-mother made butter for the household is shown, and consists of a long bamboo sticking out of a carved stone. A spot in the wall is pointed out as the place where the sportive milkmaids hid Krishna's flute. One pillar is said to have been polished by his foster-mother's hand, as she leant against it when churning, and others have been equally polished by the hands of generations of pilgrims From the top of the roof there is a view over mounds of ruins, with the Jumna beyond, at intervals

Mahaban is a popular place of Hindu pilgrimage. Thousands of Vishnu worshippers, with yellow-stained clothes, yearly visit the scenes of the infancy of the child-god. The anniversary of Krishna's birth is celebrated during several days in the month of Bhadon (August)

The river-side village of **Gokul**, about a mile from Mahaban, where Vishnu first appeared as Krishna, is approached by a lofty and beautiful flight of steps (ghat) from the river. For more than three centuries it has been the headquarters of the Valabhacharya sect, or Gokulastha Gusains, whose founder started the cult of Krishna at Brindaban Pilgrims come chiefly from Gujarat and Bombay yearly, and have built numerous temples.

Some 5 m from Mahaban, on the same road, lies another famous place of pilgrimage, **Baldeo**; known more familiarly as "Dauji." The town derives its celebrity from the famous temple of Baladeva, Krishna's elder brother. Hard by the temple is a brick-built tank over 80 yds sq., called the "Khirsagar," or "sea of milk." Here, it is said, Gusain Gokul Nath was warned in a vision that a god lay concealed. Immediately a search was made, and the statue of Baladeva was revealed to the assembled multitudes

16 m to the W of **Muttra**, on the Dig road, is the famous pilgrimage centre of **Gobardhan**. This town lies astride a low narrow range of hills called the "Giriraj (Girraj) Pahar," which Krishna is fabled to have held aloft on the top of his finger for seven days and seven nights to cover the people of Braj from the floods poured down upon them by Indra. The houses cluster round the margin of a very large irregularly-shaped masonry tank, called the "Manasi (Mansi) Ganga," which, as the name denotes, is supposed to have been called into existence by the operation of the Divine will. Close to the Manasi Ganga is the famous temple of Harideva (Hardeo-ji) erected during the reign of Akbar by Raja Bhagwan Das of Amber. It is an edifice 135 ft long by 35 ft. in width, and both in plan and design is singularly like those early Romance Churches that are constantly met with in the S. of France, belonging to the 11th and 12th centuries. On the opposite side of the Manasi Ganga are two stately cenotaphs, or *chhatris*, to the memory of Ranjit Singh and Balwant Singh, Rajas of Bharatpur In that which commemorates Ranjit Singh, who died in 1805, the exploits of the British Army under Lord Lake during the unsuccessful assaults on Bharatpur, figure conspicuously in the paintings on the ceilings of the pavilions.

From Gobardhan a metalled road runs N. to **Radha Kund**,

distant about 3 m. — another famous place of pilgrimage. On the way between the two places is a cenotaph, erected in honour of Raja Suraj Mal, the founder of the present ruling family of Bharatpur, who was killed in 1763, at Shahdara, on the Hindun river, by a detachment of Mughals, while hunting. There are several poor paintings, in one of which Suraj Mal is shown with several French officers round him. Behind the cenotaph is an extensive garden, and in front is an artificial lake called Kusum Sarovar.

Radha Kund consists of a small town clustering round two lakes, called respectively Krishna Kund and Radha Kund, after Krishna and his favourite mistress. The lakes are faced on all sides with stone ghats and only parted from each other by a broad terrace of the same material They were constructed in 1817 The holiness of the place is derived from a tradition that Krishna bathed to remove the pollution he had incurred in slaying the demon bull Arishta

Some 15 m. from Gobardhan and some 10 m by road from Kosi, on the Agra-Delhi road, lies another famous place of pilgrimage, **Barsâna**. This, according to Hindus, was the home of Krishna's favourite "milkmaid" Radha. The town is built at the foot and on the slope of a small chain of hills It was destroyed by the Mughal troops of Najaf Khan in 1773, after defeating the Jats of Bharatpur The four prominent peaks of the hills are regarded as emblematic of the four-faced divinity of Brahma, and are crowned with different buildings, mostly dedicated to deities or personages prominent in the Krishna legend. The fine buildings, nearly all now in a ruinous condition, were the work of Rup Rám Katára and Mohan Ram Lavania. Conspicuous among them is the tank and pavilion, known as Bhanokhar, with pavilions supported on a series of vaulted colonnades opening on to the water

For 3 m. before reaching Dig the road forms a sort of causeway above a very low, flat country, which was once a morass and formed the principal defence of the fortress.

At **Dig** (or Deeg) the chief object of interest is the splendid **Palace**, or rather group of palaces, built by Suraj Mal of Bharatpur Fergusson (*Ind Arch.*, 2, 179) says of it: "The glory of Dig consists in the cornices, which are generally double, a peculiarity not seen elsewhere, and which for extent of shadow and richness of detail surpass any similar ornaments in India, either in ancient or modern buildings. The lower cornice is the usual sloping entablature almost universal in such buildings. . . . The upper cornice, which was horizontal, is peculiar to Dig, and seems designed to furnish an extension of the flat roof which in Eastern Palaces is usually considered the best apartment of the house" The palace enclosure is 475 ft. by 350 ft., and has two pavilions on each side and one at each end. Several of these are figured in vol. 2, p. 82 of the *Rambles* of Sir William Sleeman The chief pavilions are the **Gopal Bhawan** (1763), flanked by two smaller pavilions and faced by an arch for a swing and two marble thrones, which stands E. of the fine unlined Tank; the **Nand Bhawan**, N E. of this, a fine hall, 150 ft. by 80 ft by 20 ft.; the **Suraj Bhawan** and the **Hardeo Bhawan**, S., and the **Kishan Bhawan**, E. again of these. The Suraj Bhawan is built of white marble and mosaic

work; the other halls are of cream-coloured sandstone. All are highly decorated, and between them are charming gardens surrounding a small tank.

Beyond the gardens is the large **Rup Sagar Lake** and beyond it the N. gate of the fort. This has twelve bastions and a ditch 50 ft broad. Beyond this is a natural mound, about 70 ft. high, and a building which serves as a prison. The walls are very massive and lofty. There are 72 bastions in all, and on the N.W bastion, about 80 ft. high, is a very long cannon

Dig is celebrated for the battle fought on the 13th November 1804, in which General Frazer defeated Jaswant Rao Holkar's army The British took 87 pieces of ordnance in this battle Holkar's army took shelter in the Fort of Dig On the 1st December following Lord Lake joined the army before this place, and immediately commenced siege operations. On the night of the 23rd his troops captured an eminence which commanded the city The enemy then evacuated Dig on the following day and the fort on the succeeding night, and fled to Bharatpur.

6 m. from Muttra by M G railway is **Brindaban** (properly Vrindaban, meaning a forest of basil plants), to which Krishna removed from Gokul

Brindaban was never a great seat of Buddhism. Its most ancient temples, five in number, date only from the 16th century, "while the space now occupied by a series of the largest and most magnificent shrines ever erected in Upper India was 500 years ago a belt of woodland" (Growse's Mathura, p. 174). The five chief temples are those of Gobind Deo-ji, Radha Ballabh, Gopi Nath, Jugal Kishor, and Madan Mohan. Brindaban is famous as the place where Krishna sported with the Gopis (milkmaids), and stole their clothes when they were bathing. The Jumna originally bounded the town to the N. and E. The river has shifted its course, leaving the ghats high and dry.

Near the entrance to the town, on the left, is a large **red temple**, dating from 1590, sacred to Gobind Deo (the Divine Cowherd, *i.e.* Krishna), now a protected monument. "It is one of the most interesting and elegant temples in India, and the only one, perhaps, from which a European architect might borrow a few hints. The temple consists of a cruciform porch, internally nearly quite perfect, though externally it is not quite clear how it was intended to be finished. The *antarala*, or inner mandap, of the original temple was afterwards apparently converted into a shrine, and is perfect internally, and used for worship, but the sikhara is gone, having been destroyed along with the cell, after which the *antarala* was made into a shrine. Though not large, its dimensions are respectable, the porch measuring 117 ft. E. and W. by 105 ft. N and S, and is covered by a true vault, built with radiating arches—the only instance, except one (the temple of Hardeoji at Gobardhan), known to exist in a Hindu temple in the N. of India On each side of the original shrines are two side chapels. Over the four arms of the cross the vault is plain, and of 23½ ft. span, but in the centre it expands to 35 ft., and is quite equal in design to the best Gothic vaulting known. It is the external design of this temple, however, which is the most remarkable. The angles are accentuated with singular force and decision, and the openings, which are more than sufficient for that climate, are picturesquely arranged and pleasingly divided. It is, however, the combination of vertical with horizontal lines, covering the whole surface,

that forms the great merit of the design" (Fergusson).

At the back of the red temple on the W. are, at two corners, two other temples which resemble each other. There is a new temple adjoining this to the W., built by a Bangali Babu. It has a finely-carved door.

E. is a modern *Temple*, built by Seth Radha Krishna and Seth Gobind Das in the Dravidian style. Europeans are not allowed to enter the inner court, but above the W. gate is a terrace which commands a view. The temple consists of a vast enclosing wall, with three gopurams, which are 80 ft. to 90 ft. high, while the gates are about 55 ft. It is dedicated to Sri Ranga, a name of Vishnu, and figures of Garuda, the man-bird of Vishnu, are very conspicuous. In the great court are two white marble pavilions, one E. and W. of the tank, and a stone pavilion with a flat roof, supported by sixteen pillars, opposite the E. gopuram.

The **Madan Mohan Temple** stands above a ghat on an arm of the river. Under two fine trees, a *Ficus indica* and a *Nauclea orientalis*, is a pavilion, in which many cobras' heads are represented. Siva is said to have struck Devi with a stick here, when she jumped off this ghat, and made it a place for curing snake-bites. On the ghat is a Saligram (a species of Ammonite worshipped as a type of Vishnu), with *two footprints* 2¼ in. *long*. This temple is 65 ft. high, and *is in* the shape of a cone.

The **Temple of Gopi Nath**, thought by Mr Growse to be the earliest of the series, was built by Raesil Ji, who distinguished himself under Akbar. It is in a ruinous condition. Its special feature is an arcade of three bracket arches.

The **Temple of Jugal Kishor** is at the lower end of the town, near the Kesi Ghat. It is said to have been built by Neo-Karan, a Chauhan Chief, in A.D. 1627. The choir has pierced tracery in the head of the arch, and above it a representation of Krishna supporting the Hill of Gobardhan. The **Temple of Radha Ballabh**, of which the shrine was demolished by Aurangzeb, is a picturesque ruin.

The Muttra district is highly irrigated. On the W. of the Jumna, the Agra Canal has head-works at Okhla, near Delhi. On the E. of the Jumna the water is provided by a branch of the Upper Ganges Canal.

From Muttra Jn. to Delhi Main Station (90 m.) the line runs close to the Agra-Delhi road, marked by Kos minars and sarais of old kings. It was to have been the route for the E.I. Ry. in 1857, but was constructed by the State, and opened in 1905. The country was wooded and the haunt of robbers, but the Agra Canal has caused a clearance.

920 m., *viâ* G I P. route, **Palwal**, in the Gurgaon District, 37 m. S. of Delhi. The Pandits identify it as the Apelava of the *Mahabharata*, part of the Pandava kingdom of Indraprastha, and tradition associates with the same period the high mound of the old site of Aharwan, a village a few miles to the S.W. It is said to have lain in a state of decay for a long period, and then to have been restored by Vikramaditya some 1900 years ago. The oldest part covers a high mound formed by accumulated debris of many centuries. During the Mughal times it was without a history, but on the downfall of the Empire it was given with surrounding territory in *jagir* to General De Boigne, and, after the conquest by

Lord Lake, to Murtaza Khan of Delhi for a few years, after which it came under direct British rule. The town carries on trade in cotton, and has a R.H. about 3 furlongs from the railway station.

934 m **Ballabgarh**, 21 m S of Delhi on the Muttra road: built on symmetrical chess-board lines. The old Raja's palace is picturesque. Permission to occupy the R Hs. in Gurgaon Dt. must be obtained from the District Board, Gurgaon.

945 m **Tughlakabad**, on the outskirts of New Delhi The line passes through the ruins of old places S of Delhi (p. 306), the Kutb Minar, 7 m to the W., being in full sight

949 m **Okhla**, for the headworks of the Agra Canal (1874)

952 m. **Hazrat Nizam-ud-din** The line beyond was diverted for the new capital in 1920, and is worked from Kilokri by the N W. Ry.

956 m **New Delhi** (p. 313).

957 m. **DELHI** Central stn. From Delhi the "Frontier Mail" of the B.B.C.I. Ry. runs over the N W Ry. to Lahore (Route 15, p. 347) and Peshawar (Route 17).

ROUTE 13.

AGRA AND FATEHPUR-SIKRI.

[*Plan faces p. 272.*]

AGRA ✱ There are several railway stations at Agra, but visitors need concern themselves only with two. If they come in from Tundla by the E I. Ry (*Route 21*) from the E., or by the B B. and C I Ry. from the W. (metre-gauge from Bandikui, or broad-gauge from Bayana; Route 12), they will alight at the **Fort Station**, just outside the Delhi Gate of the Fort. The **Cantonment Station**, lying W. of the Cantonment, is on the G I.P. Railway main line from Bombay to Delhi (Route 9).

Two bridges across the river Jumna carry both the railway track and vehicular and foot traffic: the Strachey Bridge, built 1908 (p 430), and the Jumna bridge (for both gauges), 2427 ft. long (1876). The latter connects with the Fort station; the former goes to the City station.

Agra, headquarters of a Division and a District, in size and importance the third in the United Provinces, has a pop. of 284,149, and stands on the right bank of the Jumna, 534 ft. above sea-level.

Roads lead to (1) Gwalior, 77 m., and Jhansi, 136 m.; (2) Bharatpur, 33 m.; (3) Muttra, 36 m., and Delhi, 125 m; (4) Aligarh, 50 m.; (5) Mainpuri, 68 m. Petrol and motor requisites can be obtained from many dealers in

Partabpura, the Cantonment, and Rawatpura in the City.

Though a week might be spent in visiting the sights in and around Agra,[1] they can be seen in shorter time, and the following itinerary may be of service.—

1st Day, *Morning.*—Fort and Palace. *Afternoon.*—Drive to the Taj (with a tea-basket)

2nd Day, *Morning.*—Drive to Sikandra *Afternoon*—To Jami Masjid, Itimad-ud-daula, and Chini ka rauza, on the E bank of the Jumna.

A full day should be devoted to the excursion to Fatehpur-Sikri (23 m.)

The modern city comprises the Cantonment on the S., the Civil Station on the N.W., and the Fort on the N.E., with the Indian city resting in the centre of the triangle. The Jumna flows past the city in a direction from N. to S., but below the fort it turns on a great elbow, and in consequence the Taj is nearly due E of the S end of the fort It is desirable to visit the Agra Fort before Delhi, as otherwise it is difficult to understand the exact relation of the now isolated buildings of the Delhi palace.

The hotels are situated at the S. of the Indian city in and about the angle where the Cantonment boundary narrows on the W Near them are the Post Office, banks, and club, the last at the W end of the Mall, a very fine broad avenue, lighted by electricity, which leads E. to the Taj Road and the MacDonnell Park, laid out between the Taj and the fort, and enclosing at its N. end the memorial statue of Queen Victoria. S. of the telegraph office are fine public gardens. N. of the hotels, and on the W. of the city, situated on the Drummond Road, are the District Courts, the Agra and St John's Colleges. To the E of these and on the N. of the city, are the R.C. Cathedral, College, and Convent, and 1 m. to the N. are the Court of the District Judge and the R.C. Cemetery. The road to Sikandra, which is the main road to Muttra, runs N.W 1½ m N W of the Civil Courts is Dayal Bagh, a co-operative settlement of the Radhaswami sect and founded by Sir Anand Sarup S by W., running through the suburb of Shahganj, is the road to Fatehpur-Sikri

[1] *Agra and the Neighbourhood*, by H. G. Keene (Thacker); *Three Days at Agra*, by H. A. Newell, *Agra and the Taj*, by E. B. Havell (Longmans, 1913).

The chief **Articles of Local Manufacture** are gold and silver embroidery, carving in soapstone, and imitation of the old inlay work (*pietra dura*) on white marble Agra is famous also for its carpets. There is a flourishing boot and shoe industry

History.—Nothing definite is known of Agra before the Muslim conquest Sikandar Lodi took it from the rebellious Muslim Governor of Bayana, and made it his capital in 1501 Sikandar Lodi died at Agra in 1517 A.D., but was buried at Delhi, he built the Baradari Palace, near Sikandra, which suburb received its name from him. Babar claimed to have employed eighty stone-masons daily, and is said to have had a garden-palace on the E bank of the Jumna, nearly opposite the Taj There is a mosque near the spot, with an inscription, which shows that it was built by Babar's son, Humayun, in 1530 A.D

The Emperor Akbar resided at Agra in the early years of his reign His capital was at Fatehpur-Sikri from about 1570 to 1585 After a period at Lahore, he returned to Agra in 1599, where he died in 1605. The only buildings that can now be attributed to him with

certainty are the walls and the red sandstone buildings in the S.E. corner of the fort. Jahangir left Agra in 1618, and never returned Shah Jahan resided at Agra from 1632 to 1637, and re-named the city Akbarabad after his grandfather, but the new title did not endure. He built much of the fort and constructed the principal buildings of the palace and the Taj Between 1638 and 1650 he caused the palace at Delhi and the Jami Masjid to be erected, and he doubtless intended to remove the Capital to that place. Before this was finally done he was deposed by his son Aurangzeb in 1658, but lived as a State prisoner seven years longer at Agra Aurangzeb removed the seat of Government permanently to Delhi

In 1761 Agra was taken by Suraj Mal of Bharatpur with Jats, who did much damage In 1770 the Mahrattas captured it from the Jats, who recovered it but were themselves expelled by Najaf Khan in 1773. When Muhammad Beg was Governor, Agra was besieged and taken (1785) by Mahdaji Scindia and the Mahrattas held it till it was captured by Lord Lake, 17th October 1803, Colonel Hessing, who commanded, surrendering after a brief bombardment. The seat of government of the N W Provinces was at Agra from 1835 until 1859, when it was transferred to Allahabad Since 1902 the N.W. Provinces and Oudh (which were placed under one Lieutenant-Governor in 1877) have been known as the United Provinces of Agra and Oudh

When the Mutiny broke out at Meerut on 10th and Delhi on 11th May 1857, there were in Agra the 3rd Bengal Europeans, some British Artillery, and two Bengal Regiments, the 44th and 67th. The fort was at once secured by the Europeans, and after two companies of the N.I, sent to Muttra to bring in the treasure, mutinied and marched off to Delhi, their comrades in Agra were disarmed on 31st May. Part of the Kotah Contingent, which had been despatched to Agra in consequence of the mutinies at Nasirabad and Nimach, went off on 4th July to join the Nimach mutineers, consisting of a strong brigade of all arms at Sassia, 2 m from Agra. On 5th July Brigadier Polwhele moved out with 816 men to attack them The battle began with artillery, but the enemy were well posted, and the British guns did them little damage At 4 P M. the British ammunition was expended, Colonel Riddell advanced with the English soldiers, and captured the village of Shahganj, but they were obliged to retreat into the Fort of Agra.[1] The rebels burnt the Cantonments, murdered Europeans, and then marched to Delhi

There were now 6000 persons, including 1500 Indians, in the fort, which was put in a state of defence, Colonel Cotton assuming command On the 20th of August he sent out Major Montgomery with a small column, which on the 24th defeated the rebels at Aligarh, and took that place. On the 9th September Mr Colvin, Lieut-Governor of the N.W Provinces, died The Nasirabad Brigade, with other mutinous regiments, advanced, on 6th October, upon Agra At this moment Colonel Greathed's force from Delhi arrived The rebels were completely routed at the Kari Nadi on 10th October, and Agra was finally relieved

The **Taj Mahal** should be seen repeatedly The best time for a first visit is late in the afternoon,

1 A vivid picture of the state of affairs in Agra during this period is given in Mr M Thornhill's *Personal Adventures and Experiences of a Magistrate in the Indian Mutiny*. See also Lord Roberts' *Forty-one Years in India*

but it should be seen by moonlight also. It was commenced in 1040 A.H., or 1630 A.D., by the Emperor Shah Jahan, as a tomb for his favourite queen, Arjmand Banu, entitled Mumtaz-i-Mahal, the "Elect of the Palace," whence the name Taj Mahal is derived She was the daughter of Asaf Khan, brother of Nurjahan, the famous empress-wife of Jahangir. Their father was Mirza Ghiyas Beg, a Persian, who came from Teheran to seek his fortune in India, and rose to power under the title of Itimad-ud-daula (see p. 272). Mumtaz-i-Mahal married Shah Jahan in 1615 A.D., had by him fourteen children, and died in child-bed of the last in 1629, at Burhanpur, in the Deccan (p 42). Her body was brought to Agra, and first laid in the garden. The Taj cost, according to some accounts, 185 lakhs, and according to others, 317 lakhs. It took twenty-two years (1630-1652) to build, according to Tavernier, who records that he saw both its commencement and completion, and that the scaffolding used was constructed of brick Two silver doors at the entrance were taken away and melted by Suraj Mal and his Jats Austin of Bordeaux, a silversmith in the Emperor's service, probably took part in the decoration, especially in the metal work of the doors and golden screen which originally enclosed the cenotaph [1]

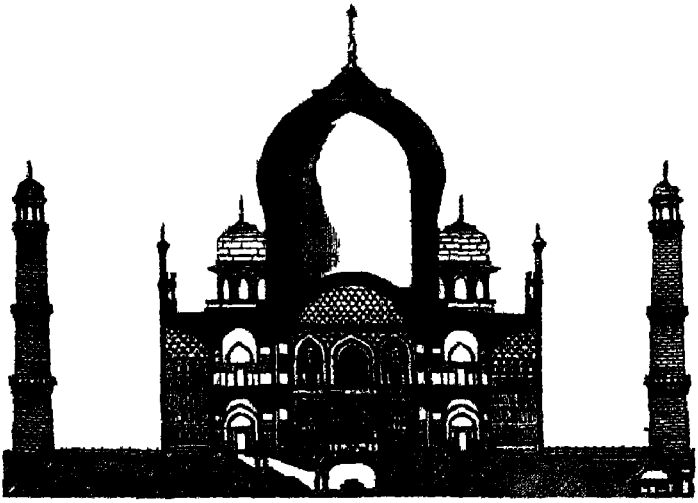
Before reaching the Taj the State Circuit House will be seen on the left. The surroundings of the Taj enclosure have been restored and both the tomb and the Fatehpuri mosque of red sandstone flanking the approach from the fort are prominent.

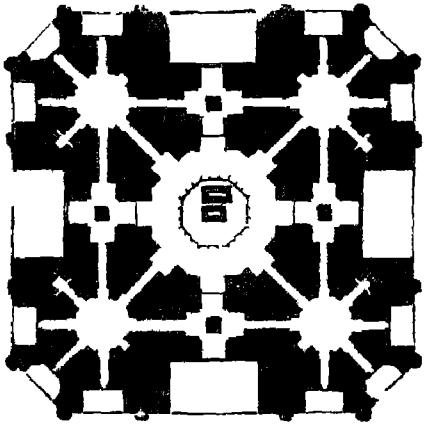
The approach is by the *Taj Ganj Gate*, which opens into an outer court 880 ft. long and 440 ft wide Inside the court are two tombs raised on an upper storey in the S.W. and S.E. corners; and in the N.W. and N.E. corners are two enclosures On the right is a gate which leads into the quarter S of the Taj, where are portions of the original serai erected by Shah Jahan.

On the left is the **Great Gateway** of the garden, built 1648, of red sandstone, inlaid with ornaments and inscriptions from the Koran in white marble, and surmounted by twenty-six white marble *chattris* In two rooms above there is a Museum (1903) and the best view is obtained

The Taj garden is laid out in formal style, the whole to the S of the platform of the Taj being divided by two main causeways into four portions, which are again subdivided into four The principal vista is along a red sandstone watercourse, set between rows of cypresses, formerly peaches, and interrupted in the middle by a marble platform. The Taj rises at the end, and is mirrored in the watercourse. Endless beautiful views can be enjoyed from seats in the gardens Along the S. wall on either side of the great gate is an extremely fine pillared gallery of red sandstone. The beauty of the Taj is perhaps

[1] According to Fray Sebastian Manrique of the Society of Jesus, who visited Agra in 1640, the designer of the Taj was a Venetian jeweller of the name of Geronimo Veroneo, who died at Lahore in that year and is buried in the old R C cemetery at Agra. The ultimate authority for the statement is Father Josef da Castro, another Jesuit, who was Veroneo's executor, and died at Agra in 1646 Mr Havell, however, discredits the story (*XIXth Century*, June 1903). Dr. Chaghtai considers that Shah Jahan himself designed it, inspired, perhaps, by this Tomb of Humayun at Delhi.





Section and Plan of the Taj Mahal.

most perfect immediately after sunset, or under the moonlight, but every change of light seems to lend new graces to it, and the view at sunrise is magnificent Those who linger for evening or night effects must take precautions against a chill.

The central marble platform on which the tomb stands is 22 ft. high and 313 ft. sq At each corner is a minaret of white marble picked out by black lines 137 ft. high The tomb itself measures 186 ft. on each side, the corners being bevelled off and recessed into a bay. On either side of each angle corner is another small bay, and in the centre of each side is a deeply recessed bay 63 ft high. The height of the walls and parapet over them is 108 ft ; at each corner above them rise smaller marble domes, and in the centre soars the great central dome, which rises to a height of 187 ft, the metal pinnacle making a total of 243 ft "This building," wrote Fergusson (*Indian Architecture*, 2, 316), "is an exquisite example of that system of inlaying with precious stones which became the great characteristic of the style of the Mughals after the death of Akbar"

All the spandrels, as well as the angles and more important details, are inlaid with precious stones. These are combined in wreaths, scrolls, and frets, as exquisite in design as beautiful in colour, and though not to be compared with the beauty of Greek ornament, convey a high idea of the taste and skill of the Indian architects of the age

The delicately-sculptured ornamentation, in low relief, is in its way as beautiful as the *pietra dura* work itself The letters of the inscription over the central bay are graduated in size to appear equal from below

In the centre of the tomb is an octagonal chamber surrounded by other rooms. From the corner rooms spiral stairs lead to the roof Each side of the central room measures 24 ft The inner dome rises 80 ft above the pavement, and is 58 ft in diameter. Under the centre of the dome, enclosed by a trellis-work screen of white marble—it probably dates from the reign of Aurangzeb—are the tombs of Mumtaz-i-Mahal (in the centre) and of Shah Jahan (shaped like a pen-box) "These, however, as is usual in Indian sepulchres, are not the true tombs—the bodies rest in a vault, level with the surface of the ground, beneath plainer tombstones, placed exactly below those in the hall above" Over the two tombs hangs a fine Cairene lamp, the graceful gift of Lord Curzon The inscriptions on them are "The resplendent grave of Arjmand Banu Begam, called Mumtaz-i-Mahal, died in 1040 A H" (1629 A D.), and "The illustrious sepulchre of His Most Exalted Majesty, dignified as Razwan (the guardian of Paradise) having his abode in Paradise and his dwelling in the starry heaven, inhabitant of the region of bliss, the second lord of the Kiran (the conjunction of Jupiter and Venus, during which he was born), Shah Jahan the King valiant. He travelled from this transitory world to the world of eternity on the night of the 28th of the month of Rajab 1076 A.H." (1666 A D.). The Queen's Tomb bears the 99 names of Allah. "The light to the central apartment," says Fergusson, "is admitted only through double screens of white marble trellis-work of the most exquisite design, one on the outer and one on the inner face of the walls. In our climate this would produce nearly complete darkness; but in India, and in a building wholly composed of white marble,

this was required to temper the glare that otherwise would have been intolerable. As it is, no words can express the chastened beauty of that central chamber, seen in the soft gloom of the subdued light that reaches it through the distant and half-closed openings that surround it [1] There is a most wonderful echo in the dome "

For the excellent work done at Agra and at Fatehpur-Sikri and Sikandra the public have to thank Sir John Strachey, Sir Antony (Lord) MacDonnell, and his able assistant, the late Mr E W Smith, and, lastly, Lord Curzon, who laid down a programme of restoration and supervised it.

On a lower level at either side of the mausoleum are two fine buildings of red sandstone, a mosque on the W, and an assembly hall, its *jawab* (answer) or complement on the E On the pavement in front of the hall, which bears the unusual decoration of flowers, is a representation of the finial of the Taj. The Taj was intended to be seen balanced between these two buildings.

By crossing the river in the ferry-boat, which will be found at the end of the road which runs outside the W. wall from the entrance to the outer court, this beautiful view can be obtained. An immense construction on the W. will be remarked, resembling a well, with a well-run by which water was once raised from the river to supply the fountains From the farther side various paths lead to the E end of the Jumna Bridge, if it is desired to return by that route.

The Fort.—Many magnificent Mughal buildings are situated within the fort, which has a circuit of over a mile. A pass is required, obtainable from the station staff officer or, within certain hours, at the Amar Singh Gate, the only entrance now. The walls and flanking defences are of red sandstone, and present an imposing appearance, being nearly 70 ft. high, the finest portion of them is along the N side and to the S of the N.E. bastion. The ditch is 30 ft. wide and 35 ft. deep The Water Gate on the E. is closed, also the Delhi Gate on the W to which the visitor should walk

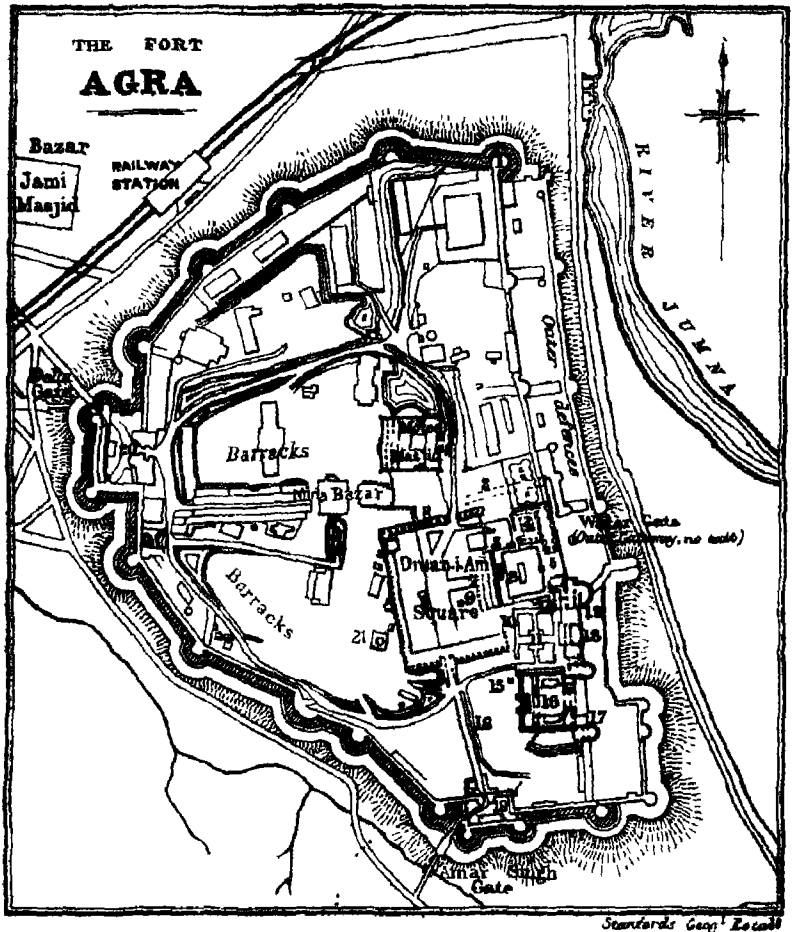
Outside the Delhi Gate, and connecting with the Jami Masjid, was the Tripulia court, removed after 1857, in it was the Nakkar Khana, music gallery.

Inside the Delhi Gate, the inner archway bearing a date of 1600 A.D, a somewhat steep slope between red sandstone walls will be found to lead to another gateway called the *Hathi Pol*, or " Elephant Gate "

Two stone elephants with riders, which stood on platforms on either side of the Gate, were overthrown by order of Aurangzeb According to William Finch, who visited Agra in the reign of Jahangir (1610), the riders represented two Rajput brothers, slain " by multitudes oppressing " for refusing to surrender their nephew.[1] The archway is flanked by two octagonal towers of red sandstone, relieved with designs in white marble. The domed interior of the gateway, with a raised plat-

[1] The light in the interior is hardly sufficient since the marble grilles have been fitted with glass.

[1] It has been supposed that these statues were removed by Shah Jahan to Delhi when he built his new palace there But Mr Havell (*Agra and the Taj*, p. 41) has pointed out that the marks on the platforms at Agra do not correspond with the dimensions of the elephant which was found at Delhi. The statues, without riders, which now stand at the Delhi Gate of the Delhi Fort are modern (p 302) Figures of elephants were commonly placed in front of palaces and fortresses.



1 Northern Tower
2. Descent to Water Gate
3 Nagina Masjid and ladies' private Bazar
4 Small Courts and ruins of Baths.
5 Open Terrace with Diwan i Khas on S side
6. Recess where the Emperor's Throne stood.
7 Diwan-i-'Am (Hall of Public Audience)
8. Machchi Bhawan
9 Mr Colvin's Grave.
10. Mina Mosque
11 The Anguri Bagh (Grape Garden)
12 Saman Burj (Octagon Tower). At N. angle is an outlet by secret passage.
13 Khas Mahal
14 Shish Mahal (Mirror Palace).
15 Well
16 Palace of Jahangir (or Akbar).
17. Tower. At the base is an entrance to a secret passage.
18 Incline from Amar Singh's Gate
19 Court of Amar Singh's Gate.
20 Elephant Gate.
21 Kiosk of Salimgarh

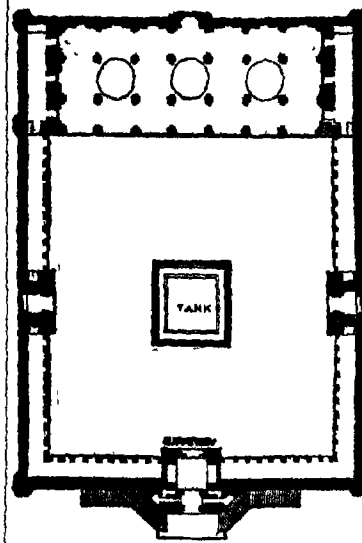
form for the guard on either side, is very striking The inner elevation is reminiscent of early Florentine palaces

Inside the Hathi Pol one road sweeps to the left and turns to the front of the Moti Masjid and the N gate of the court in front of the Diwan-i-'Am, while another connects with the Amar Singh Gate and the S gate of the court of the Diwan-i-'Am The first should be followed At the summit a palace building was destroyed after 1857.

The **Moti Masjid**, the "Pearl Mosque," "one of the purest and most elegant buildings of its class to be found anywhere" (1646-53), was built by Shah Jahan on ground sloping from W to E, and the fine entrance gateway of red sandstone makes a trihedral projection from the centre of the E face, it is approached by a double staircase with a restored railing. The exterior is faced with slabs of red sandstone, the interior built of marble—white, blue and grey veined.

In the centre there is a marble tank, 37 ft 7 in sq, for ablutions, S.E. of which there stands an ancient sundial, consisting of an octagonal marble pillar, 4 ft. high, with no gnomon, but simply two crossed lines and an arc A marble cloister runs round the E., N., and S. sides of the court, which measures 234 ft and 183 ft., interrupted by archways, of which those in the N and S. sides are closed

The mosque proper (149 ft. by 56 ft) consists of three aisles of seven bays opening on to the court-yard, surmounted by three domes On the entablature over the front row of supporting pillars—i e, on the E face—there is an inscription running the whole length, the letters being of black marble inlaid into the white The inscription records that the mosque was built by Shah Jahan and likens it to a precious pearl Narrow steps



Moti Masjid

lead to the top of the gateway and to the roof of the mosque, from which there is a fine view.

Beyond the cross road to the Mina bazar, now demolished, on the right and the descent to the Water Gate on the left is the entrance to the court of the Diwan-i-'Am, with colonnades. In front of the Darbar Hall is the tomb of Mr Colvin, the Lieut-Governor (died 1857) The Diwan-i-'Am, or Hall of Public Audience, is 208 ft long by 76 ft.

deep, and consists of three aisles of nine bays open on three sides. The roof is supported by columns of red sandstone Along its back wall are grilles, through which ladies could watch what was going forward in the hall below, and in its centre is a raised alcove of white marble, richly decorated with *pietra dura* work and low reliefs The present hall was built by Shah Jahan, to replace a previous wooden structure

The entrance to the inner courts of the Palace from this side is by a passage and steps to the N. of the Diwan-i-'Am, it was probably into these courts that William Hawkins was taken by the Emperor Jahangir in 1609 [1] The first enclosure entered is the **Machchi Bhawan**, or "Fish Square," which formerly possessed a large tank A two-storeyed cloister runs all round it, except on the side which fronts the Jumna, where the upper storey gives place to an open terrace In the N side are two bronze gates (kept closed) taken by Akbar from Chitorgarh (p 152), and at the N.W corner is a beautiful little three-domed mosque of white marble, called the **Nagina Masjid**, or "Gem Mosque" This was the private mosque of the royal ladies of the court, and was built by Shah Jahan Beneath, in a small courtyard, was a bazar where merchants used to display their goods to the ladies of the court On the terrace on the river-side is a black throne with a white seat opposite it The throne has a long fissure, which is said to have appeared when the throne was usurped by the Jat Chief of Bharatpur in 1761 A reddish stain in one spot is alleged to be blood An inscription runs round the four sides, stating that "when Salim became heir to the crown his name was changed to Jahangir, and for the light of his justice he was called Nur-ud-din His sword cut his enemies' heads into two halves like the Gemini" The date given is 1011 A H = 1603 A D Beneath this terrace is a wide enclosure within the outer walls, where contests between elephants and tigers took place On the N of the terrace is the site of a hall of inlaid marble and of various rooms of the Bath, or **Hammam**, now in a ruinous condition

On the S is the **Diwan-i-Khas**, or Hall of Private Audience, consisting of an open colonnade in front and an enclosed room at the back, and measuring 65 ft by 34 ft by 22 ft high The carving is exquisite, and the flowers inlaid on the white marble with red cornelian and other valuable stones are introduced with better, because more sparing, effect than in the Diwan-i-Khas of Delhi The date of the building is 1046 A H = 1637 A D, derived from the title Sa'adat Sarai wa Humayun Asas, the Abode of Joy and Auspicious Home A staircase leads from the Diwan-i-Khas to the **Saman Burj**, a few steps on the right conducting to the tiny **Mina Masjid**, or private mosque of the Emperor, probably the smallest mosque in existence The proper name of the Saman Burj is Musamman, or Octagon, but it is generally known by a corruption of its name as the Jessamine (Yâsmin) Burj; the chief Sultana lived in the beautiful pavilion, with a fountain and retiring-room over the river The lovely marble lattice-work seems to have been broken by cannon-shot in some places. Part of the marble pavement in front of it

[1] "Perceiving I had the Turkish tongue, which himselfe well understood, hee commanded me to follow him into his chamber of presence (*diwan i-khas*), being then risen from that place of open audience" (*diwan i-am*) See the account as reproduced in Sir William Foster's *Early Travels in India* (Clarendon Press, 1921, p 81)

is made to represent a Pachisi board [1]

Opposite the Saman Burj, but usually entered from the next court, is the **Shish Mahal**, literally "Mirror Palace." It consists of two dark chambers furnished with fountains and an artificial cascade arranged to fall over lighted lamps The walls and ceilings are decorated with pounded talc and with innumerable small mirrors, some of which were restored in 1875

Above the buildings at this spot, and approached by steps above the Mina Masjid, are the remains of reservoirs and water-ducts and arrangements for the raising of water from below From the roof a fine view is also obtained of the courts, on either side of it, of the Moti Masjid and the Taj, of which many views are obtained along the river from the terrace of the Machchi Bhawan to the Palace of Akbar

The **Anguri Bagh** or "Grape Garden," now entered, is a square of 280 ft, now planted with grass In the centre of the E side is a lovely hall called the **Khas Mahal**, the gilding and colouring of which were in part restored in 1875 In front are small tanks and fountains The Khas Mahal undoubtedly formed the model upon which the Diwan-i-Khas at Delhi was built, it measures 70 ft by 40 ft Under the platform are subterranean apartments for use in the summer, from which passages continue behind the fort wall

On either hand, also facing the river, are the **Golden Pavilions**, so called from their curved roofs being covered with gilded plates of copper. In them are bedrooms for ladies, with holes in the wall 14 in deep, into which they used to slip their jewels. These holes are so narrow that only a woman's hand could draw out the contents.

In the S E corner of the Anguri Bagh three rooms, beautifully decorated in fresco, were the private apartments of Shah Jahan. In the room nearest the river, an octagonal pavilion and very beautiful, according to tradition, Shah Jahan died in 1666, gazing upon the Taj To the W of the rooms is another in which stand the spurious Gates of Somnath (p 242), 12 ft high and finely carved; they are of deodar, not sandalwood, and of a later and corrupt, though well recognised, Muslim design There is a Kufic inscription running round them, in which the name of Sabuktagin has been read They were captured by General Nott at Ghazni, and brought in 1842 to India at the desire of Ranjit Singh

The **Jahangiri Mahal**, of red sandstone, 249 ft by 260 ft, was built probably by Akbar, and stands in the S E part of the fort, between the palace of Shah Jahan and the Bangali bastion The principal façade on the E is decorated with bright tiles in the upper portion, and is pierced in the centre by an entrance gateway This leads through a vestibule into a domed hall, 18 ft sq, the ceiling of which is elaborately carved, and from which a corridor leads into the central court, which is 72 ft sq The general atmosphere and design of this court is predominantly Hindu, but the minute and exquisite surface carving is Saracenic

"On the N side of the court is a grand open pillared hall, 62 ft long and 37 ft. broad The pillars

[1] The game of *Pachisi* is not in the least like chess, to which it is often compared It is played by four players, who each have four pieces The moves are regulated, as in backgammon, by the throwing of dice The board consists of four rectangles, of which each is made up of three rows of eight squares.

support bracket capitals richly carved and ornamented with pendants. The front brackets support broad sloping eaves of thin stone slabs. But the stone *roof* or ceiling of this pillared hall is the most remarkable feature about it. It is supported most curiously by stone cross-beams, which are ornamented with the quaint device of a great serpent or dragon carved on them lengthways. A covered passage or corridor runs round the top of this hall, from which one can look down into it The other pillared hall on the opposite or S side of the grand court is somewhat less in size "

From the grand court a large chamber to the E. leads to a recessed portico in the centre of a quadrangle which faces the river, supported by two lofty pillars and two half pillars of the more slender and graceful Saracenic kind Some of the chambers are lined with stucco, which has been painted, and has lasted better than the stonework The palace ends on the side facing the river, with a screen wall and two corner bastions, each surmounted by an ornamental tower with a domed cupola There are many vaulted chambers underneath the palace, used during the summer

The **Akbari Mahal** lies to the S. of the so-called Jahangiri *Mahal* From the Eastern rooms, opened up by the Archæological Department (little else remains), a view of the Taj and river is obtainable The principal feature of these buildings was the large central courtyard, some 140 ft square. The Western façade of the building stretched Southwards to a point near the S outer wall of the fort, terminating in a *burj*, or tower, probably similar in design to the Southern *burj* of the Jahangiri Mahal. A small portion of the façade near the Southern *burj* of the Jahangiri Mahal shows a similarity in design to the façade of the Jahangiri Mahal. The foundations were all disclosed by excavation, and the plan of the palace is now outlined by shrubberies The two small courtyards in front of the Akbari Mahal were probably constructed about 1800.

In the space in front of the Jahangiri Mahal is the *Haus* of Jahangir, an enormous monolithic cistern of light-coloured porphyry, externally nearly 5 ft high, and internally 4 ft deep and 8 ft in diameter at top, and at the N W corner is the head of the descent to the Amar Singh Gate, so called from the elder brother of Maharaja Jaswant Singh of Jodhpur, who was disinherited by his father for his turbulence, and was killed there in 1648 with all his followers after a fatal brawl in the Diwan-i-'Am, Shah Jahan being present The S W bastion was battered by Lord Lake in 1803 so successfully that the Mahratta garrison at once surrendered

Before descending, the little Early Mughal Pavilion, situated on high ground outside the S W corner of the Diwan-i-'Am court, should be visited It is an ornamental structure apparently, contemporary with the Jahangiri *Mahal, but ascribed by some* writers to Salim Shah (1545-55).

Outside the Amar Singh Gate (opened up 1809) is the half-buried figure of a horse in red sandstone, and on rising ground to the S.W. are old cemeteries. Near by is the N. end of the MacDonnell Park surrounding the memorial of Queen Victoria, by Thorneycroft. The bronze statue, which is of a standing figure on a high base, was unveiled by King

George V., then Prince of Wales, on 18th December 1905.

On Drummond Road is the **Agra College**, which owes its origin to the Gwalior State The Maharaja in 1796 gave certain villages in the districts of Muttra and Aligarh to a learned Brahman for the twofold purpose of keeping up a Sanskrit School and of supplying the wants of pilgrims visiting the shrines around Muttra In 1818 the original grantee left his lands in trust to the E India Co , who devoted part of the proceeds to the establishment of this college, opened 1823 It is managed by a board of trustees and forms part of Agra University (1927), which controls external work formerly done by the Allahabad University N of the Agra College the grounds on each side of the Drummond Road belong to St John's College, the most important of the educational institutions of the Church Missionary Society in India It carries out Rural Reconstruction Services in villages W of Agra The buildings were designed by the late Sir Swinton Jacob, and contain a library and a very large hall. Students—Christian, Hindu, and Muslim—assemble here daily at 10 A.M in the cold weather for the opening prayers. Adjoining the College are large schools for Christian boys and girls Extending Eastwards from the Drummond Road towards the Fort are the Dufferin Hospitals, Medical Schools and Thomason Hospital The Medical School, founded in 1854, affords teaching only. Situated in the Western outskirts of the city is the Kalan Masjid of the Early Mughal period

The Muttra Road leads to the **Roman Catholic Cathedral, Convent, and Schools**, dedicated to the Virgin Mary, the first with a tower about 150 ft. high ; also St Peter and St Paul's College. The Mission was founded in the time of Akbar, and has long been celebrated for its school, where the children of soldiers and others are educated.

The earliest tombs of Christians are in the R.C. cemetery at Lashkarpur, which lies ¼ m to the N The most ancient epitaphs are in the Armenian character Among the tombs are those of Colonel John Hessing (died 1803), a miniature of the Taj in red sandstone, John Mildenhall (died 1614), the self-styled envoy of Queen Elizabeth (the earliest known European tomb in northern India), and the notorious Samru, Walter Reinhardt (d 1778)

At the end of Church Road is the Kandahari Bagh (Bharatpur House), where Shah Jahan's first Persian wife was buried, and N of it again the Seth's Garden, once containing the graves of Faizi and Abul Fazl (p 279) and their sister, Ladli Begam.

In the Protestant cemetery, close to St Paul's Church, are the tombstones of three English factors, Ofley (1627), Drake (1637), and Purchas (1651) The Cantonment (Havelock Memorial) Church was rebuilt in 1873 on the site of a Baptist Church

1½ m N W of the Civil Courts is **Dayal Bagh**, a settlement (1915) of the Radha Swami Sect, where interesting experiments in education and social and religious life are being made by a community

The Jami Masjid faces the Delhi Gate of the fort, close to the Fort Railway Station, and a good view of it is obtained from the footbridge to the station. It stands upon a raised platform 11 ft. high, reached by flights of steps on the S and E. sides. The

mosque proper measures 130 ft by 100 ft., and is divided into five compartments, each of which opens on the courtyard by an archway. The inscription over the main archway sets forth that the mosque was constructed by the Emperor Shah Jahan in 1648 in the name of his daughter, Jahanara, who afterwards shared her father's captivity (pp. 296 and 304) Three great full-bottomed domes without necks, built of red sandstone, have zig-zag bands of white marble circling round them.

The Tomb of I'timad-ud-daula lies about 250 yds to the N from the E end of the Jumna railway bridge, which carries vehicular and foot traffic. (The Jumna Bridge station on the Tundla branch is just across the bridge.) The mausoleum was built by the Empress Nur Jahan for her father, Mirza Ghiyas Beg, a Persian, who was grandfather of the lady of the Taj.

The tomb stands on a platform 4 ft high measuring 150 ft each way, and is itself 69 ft sq At each corner is an octagonal tower 40 ft high, and on the terrace of the roof is a pavilion 25 ft sq , and the design of the mausoleum seems to have served for that of the Emperor Jahangir also, built by Nur Jahan at Shahdara, near Lahore (p 359). The centre room below, 22 ft square, contains the two tombs of I'timad-ud-daula and his wife, made of yellow coloured marble ; the side rooms round it display paintings of flower vases, fruits, etc , which were also reproduced in the Shahdara mausoleum. The marble lattice-work of the passages admitting light to the interior is extremely fine. The pavilion on the terrace has a curved Bengali roof and broad sloping eaves, and contains two marble cenotaphs corresponding to those below The whole of the exterior and much of the interior is of white marble with inlay work, the earliest of its particular character known in India (A D 1628), though its prototype will be seen in the spandrels, etc , of the South Gateway of Akbar's Tomb at Sikandra (A D 1614)

Half-a-mile N of this is the **Chini ka rauza**, or china tomb. The Persian influence will be noticed It is the burial-place of Afzal Khan, who was in the service of Jahangir and Shah Jahan He died at Lahore in 1639, and was buried at Agra in the tomb he had erected during his own lifetime It has one great dome resting on an octagonal base In the centre of the octagonal domed chamber, much ruined, are two tombs of brick, which have replaced marble tombs Externally it is decorated with enamelled plaster work, such as was also used on Mughal buildings at Lahore , the flower patterns of many of the panels are very effective.

Farther up the east bank of the river again is the Rambagh, where the Emperor Babar is said to have been buried pending the erection of his mausoleum at Kabul, with a terrace on the riverside

The mausoleum of the **Emperor Akbar** at **Sikandra** (so named from Sikandar Lodi, who reigned A.D. 1488-1517) is at 5½ m. along the Muttra road The Delhi Gate, built in Shah Jahan's time, stands across the road. There are two *Kos minars*, or milestones, and several tombs on the way. On the left side of the road, about 4 m. from Agra, and nearly opposite the

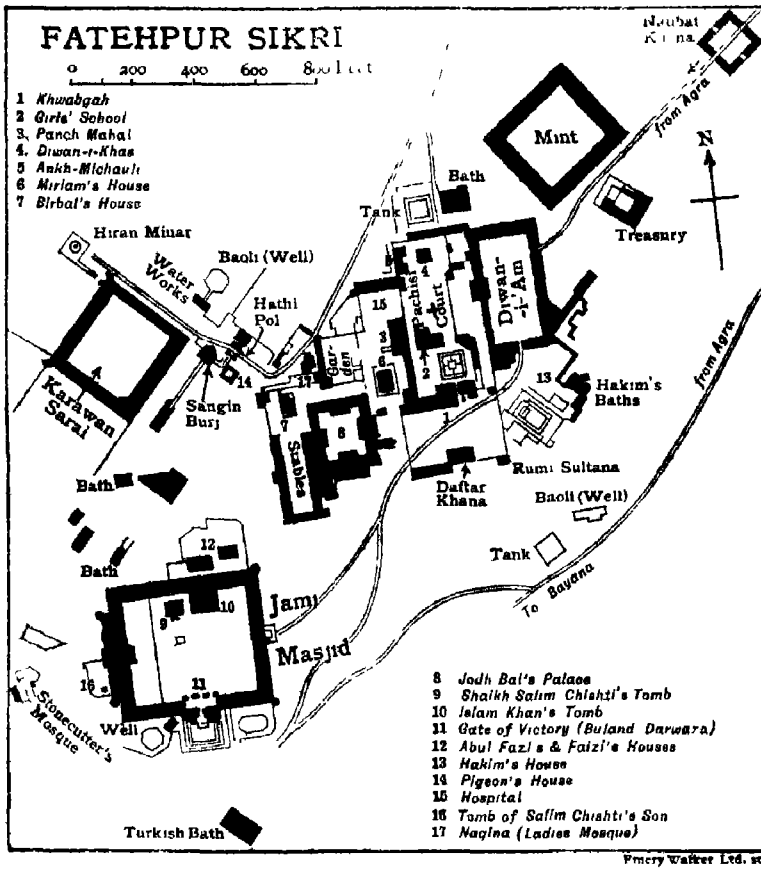
lofty arched gateway of an ancient building called the Kachi ki sarai, there is a sculptured horse, said to have been erected in memory of a favourite horse of Akbar's, which died near this spot At ½ m farther on, a little back from the road on the E side, is a tank of red sandstone, with ornamental octagonal towers, called Guru ka tal On the S side are three flights of steps, and E of them is a long and broad water-channel ½ m beyond the mausoleum of Akbar is a red sandstone two-storeyed building, the ground floor of which contains forty chambers Each corner of the building is surmounted by an octagonal *chhattri*. It is the Baradari of Sikandar Lodi, built 1495, and tomb of Mariam uz zamani, a Hindu wife of the Emperor Akbar, and whom tradition has converted (on no real grounds) into a Christian In 1838 the building was handed over to the Church Missionary Society for the accommodation of famine orphans A church and school were built, and the tomb was converted into a printing press In 1912 it was purchased by the Government and is now a protected monument The carved sandstone facing has sustained some damage

A fine gateway leads to the great garden enclosure in which the mausoleum of the Emperor Akbar is situated . on either side of it in flanking walls are boldly-pierced sandstone grilles. It is of red sandstone, inlaid with white marble in various polygonal patterns, very massive, and with a splendid scroll of Tughra writing a foot broad adorning it. On the top of the gateway, at each corner, rises a marble minaret of three storeys; cupolas destroyed by the Jats have been restored. The gate should be ascended to view the mausoleum.

A broad paved causeway leads to the mausoleum, a pyramidal building 74 ft high, of four storeys, three of which are of red sandstone, the fourth of white marble The lowest storey, 30 ft high, measures 320 ft each way, and the top storeys 157 ft. Fergusson perceived a resemblance to a Buddhist monastery A massive cloister runs round the lowest storey, broken in the centre of the façade by a lofty archway, the portion on the S forming the entrance to the tomb chamber The vaulted ceiling of the vestibule was elaborately frescoed in gold and blue, and a section of this has been restored The Surah-i-mulk (chapter of the Koran) runs under the cornice in a scroll 1 ft. broad A gentle descent leads to the dark chamber On the S. façade, on either side of the main arch, some bays of the cloister are screened off, and contain tombs with inscriptions in beautiful characters In a niche in the side of the room, farthest from the entrance, is an alabaster tablet inscribed with the 99 divine names

Narrow staircases lead to the platforms and terraces above. The top storey is surrounded by a beautiful cloister of white marble, carved on the outer side into lattice-work in squares of 2 ft., every square of a different pattern. In the centre is the splendid white monolith cenotaph of the Emperor, engraved with the 99 glorious names of Allah, exactly over the place where his body rested in the vaulted chamber below. On the N. side of the cenotaph is inscribed the motto of the sect he founded, "Allahu Akbar," "God is greatest"; and on the S side, "Jalla Jalalahu," "May His glory shine." To the N of it, at the distance of 4 ft, is a handsome white marble pillar 2½ ft high, which, according to tradition, was once covered with gold and con-

tained the Koh-i-nur.[1] The gateway recesses in N., E., and W. walls of the garden are decorated with marble mosaics. The cost of the tomb was 15 lakhs



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be dusty. There is also a railway station (27 m.) on the B.B.C.I. Ry. broad-gauge chord line from Agra Fort station to Bayana (Route 12).

The road runs through the suburb of Shahganj, at the entrance to which the ruins of a mosque, with an inscription recording that it was built in 1621, mark the site of the old Ajmir Gate Farther on is a Muslim cemetery, with a tomb said to be that of Mirza Hindal, son of Babar, father of Akbar's chief wife At the foot of the tomb is a monolith 7 ft high, with the date 1570. The

FATEHPUR-SIKRI Motor-cars for the trip (23 m.) to Fatehpur-Sikri can be hired in Agra and will also be supplied by the hotels The road (which is the one used by Akbar himself) is a good one, and shady, but the drive is apt to

[1] The diamond of this name probably did not come into the Mughal possession till the reign of Shah Jahan See Appendix to Ball's *Tavernier* (Macmillan, 1889)

road, like that to Sikandra, is marked by *Kos minars*, or milestones, 20 feet in height, at distances of 2 m., continued to Ajmere

The royal, long-deserted, city of *Fatehpur-Sikri*, standing on a low sandstone ridge, was the creation of Akbar (1569), who experimented in Hindu and Persian styles Perfectly preserved, it is a unique specimen of a city in the exact condition in which it was occupied by the Great Mughal and his court The alleged reason for its construction was the presence on the spot of the Chishti Saint, Shaikh Salim, who foretold the birth of Akbar's son Salim (Jahangir), and the reasons for its desertion were the difficulty of obtaining good water, and unhealthy surroundings

The city, which was nearly 7 m. in circumference, was surrounded on three sides by a wall pierced by eight gateways; on the N.W. side was a large artificial lake, now dry, which measured some 20 m round the banks

The buildings seem irregular, but the whole was carefully planned The position of the Khwabgah, Akbar's private room, commands the *Daftar Khana*, Record Office, and the whole of the principal buildings, and from it he could reach, without being observed, the "Jodh Bai" Palace, Miriam's House, Birbal's House, the Panch Mahal, the Turkish Sultana's House, and the Ibadat Khana (Diwan-i-Khas)

The visitor enters by the Agra gate at the N E corner, takes the right-hand road at the fork (the road to Bayana (p. 248) is on his left), and drives past a large quadrangle with a ruined cloister. The road then passes beneath the Naubat Khana, from the upper rooms of which musicians played as the procession entered. Farther (left) are the remains of the **Treasury**, and opposite it what is known traditionally as the **Mint**. Near the mint a new Travellers' Rest House has been built

The road enters the court of the **Diwan-i-'Am**, measuring some 366 ft from N to S by 181 ft from E. to W., and surrounded by a flat-roofed cloister On the W. side is the Audience Hall, with a deep veranda in front, and an isolated space for the Emperor between two pierced stone screens of fine geometric design. The room behind has a peculiar roof, which was painted

The road leaves the courtyard on the S to the **Daftar Khana**, or Record Office At the back is a staircase leading to the roof, from which there is a good view of the city. The inner stone partition wall is modern

On the right of the road is the back of the **Khwabgah**, or Sleeping Apartment, literally "House of Dreams" Written on the internal walls over the architraves of the doors are some Persian complimentary verses (much defaced). The remains of the paintings which once decorated it are now very slight. Below is a room, and at the E end of it a platform, supported by two fine red sandstone shafts, beautifully carved According to tradition a Hindu priest lived here

The area to the N was the **Khas Mahal** with, at the S.E corner, the **Rumi Sultana**, or "**Turkish Queen's**" **House**, which many consider the most interesting apartment of all As it now stands it consists of only one small chamber, 15 ft. by 15 ft Every square inch is carved, including the soffits of the cornices, the ceiling, the veranda pillars and pilasters Inside is a most elaborate

dado about 4 ft high, consisting of eight sculptured panels representing forest views, animal life, etc. Above, the wall takes the form of a stone lattice screen, the divisions of which were used as shelves. Much of the carving is curiously like Chinese work, and reminds one of what Abul Fazl says of the local red sandstone: "Clever workmen chisel it so skilfully as no turner could do with wood, and their works vie with the picture-books of Mani" (a legendary Persian painter).

The **Girls' School** is a small, plain building, carried on square stone piers. Upon the paving-stones of the open space in front is the Pachisi board,[1] with the Emperor's stone seat in the centre, in the form of a cross laid out in coloured pavement. It is said that the game was played with slave girls as pieces.

Just to the W. of this is the **Panch Mahal**, a building of five storeys, borne by open colonnades, each tier being smaller than the one below, till nothing but a small kiosk remains on top. It was probably erected for the ladies of the court as a pleasure resort, as the sides were originally enclosed with stone screens. The first floor is remarkable on account of the variety of the 56 columns which support the storey above, no two being alike in design. While many shafts are similar, the caps vary, at the angles of one are elephants' heads with interlaced trunks, on another is a man gathering fruit. At the N.W. angle is a group of four columns, which should be examined. From the top floor there is a splendid view.

At the N. of the quadrangle is the so-called **Diwan-i-Khas**, or hall of private audience: it is generally known as the **Ibadat Khana**, or worship house (completed in 1575), although the identification has been disputed. From the outside it appears to be two storeys high, but on entering it is found to consist of one only, with a central octagonal pillar crowned by a circular corbelled capital, radiating from which to the four corners of the building are four stone causeways enclosed by open trellis stone balustrades (restored). Tradition says that in the centre of this capital the Emperor sat, whilst friends disputed around, and the corners were occupied by the four Ministers. The shaft is beautifully carved, and deserves careful study.[1] On the E. and W. sides are stone staircases communicating with the roof. The open screen-work in the windows is modern.

A little W. is the **Ankh Michauli**, where the Emperor is said to have played hide-and-seek with the ladies of the court, but it was most likely used for records. It consists of three large, lofty rooms, surrounded by narrow passages. The ceilings of two of the rooms are curved, but the third is flat, and supported on struts ornamented with grotesque carving. In front of the S.E. corner is a small canopied structure said to have been used by an astrologer, who may have been a Hindu Guru, or "teacher". The *torana* brackets are essentially Hindu in character, otherwise the original design is typically early Mughal. The under side of the dome was painted. Adjoining these buildings to the W. is the Hospital, with some of the stone partitions forming the wards still extant. The ceilings are of solid slabs of stone, carved on the exterior to represent tiles.

[1] There is a similar board in the Saman Burj in Agra Fort (p. 269).

[1] A cast is in the South Kensington Museum.

Outside, to the W. of the Khas Mahal enclosure, is the **House of Miriam**, daughter of Raja Bhar Mal of Jaipur, Mariam uz zamani, mother of Prince Salim, afterwards the Emperor Jahangir One defaced fresco, in which the wings of angels are distinctly visible, has been thought to suggest the Annunciation. At one time the whole house was painted inside and out. The original name Sonahri Makan, or "Golden House," was given it on account of the profuse gilding of the walls

N W is Miriam's Garden, and at the S E angle her bath, with a large column in the centre On the W side is the **Nagina**, or Ladies' **Mosque**, and the remains of a small Turkish bath At the S end of the garden is a small fish tank, which, together with the stone pavement of the garden, was brought to light by Mr E W Smith (p 265)

To the N W a road leads to the **Hathi Pol** (Elephant Gate) on the N of the city. Over the W archway, 20 ft from the ground, are two life-sized elephants much mutilated — perhaps by Aurangzeb On the left of the gateway are the so-called **Pigeon House**—possibly intended for a magazine—and the **Sangin Burj**, a grained bastion or keep, said to have been the commencement of fortifications abandoned on account of objections by Shaikh Salim Chishti

Down the old stone-paved road on the left is the **Karawan Sarai** (caravanserai), a large court 272 ft by 246 ft, surrounded by the merchants' hostels Formerly the S E. side was three storeys high At the N. end, beyond the Sarai, stands the **Hiran Minar** ("Deer Minaret"), a circular tower some 70 ft. high, studded with protruding elephants' tusks of stone. Tradition says that it is erected over the grave of Akbar's favourite elephant, and that from the lantern in the top the Emperor shot driven antelope and other game The land to the N and W. was a large lake in Akbar's time, sometimes flooded now

On the left of the road returning to the Hathi Pol is a very fine stone well surrounded by rooms and staircases, which formed a part of the waterworks The water was lifted from this level by a series of Persian wheels and a system of reservoirs to the arched gate on the N W corner of Birbal's House, and thence distributed throughout the palace

The House of **Birbal** stands to the S W of Miriam's Garden, near the N W corner of the Jodh Bai palace It is said to have been built by Raja Birbal for his daughter, who, however, was not one of the wives of Akbar It is a two-storeyed building of red sandstone standing on a raised platform, and consists of four rooms 15 ft square, and two entrance porches on the ground floor and two above with small terraces in front of them, enclosed originally by stone screens, forming a ladies' promenade Over the upper rooms are flat-ribbed cupolas, carried on octagonal drums, and supported on richly-ornamented corbel brackets stretching across the angles of the rooms, and the stone-panelled walls and niches are covered with intricate patterns The ceilings of the lower rooms are supported on a fine and unique frieze, and the whole of the interior—pilasters, recesses, walls, and cusp-arched doorways—are elaborately and beautifully carved with geometrical patterns The exterior walls are almost as profusely ornamented. No wood has been used in the construction of this extraordinary building, to which the words of Victor Hugo

have been applied: "If it were not the most minute of palaces, it was the most gigantic of jewel-cases." Raja Birbal was celebrated for his wit and learning, and was the only Hindu of eminence who embraced the new religion of Akbar, whose favourite courtier he was He was no soldier, and perished with the whole of the army he was commanding in the Yusafzai country to the N E of Peshawar in 1586

S of Birbal's house are the **Stables** for 102 horses and nearly as many camels In some of the mangers stone rings for the horses' halters still remain, and on the N W side one of the old doors The camel stables are lighted by openings in the roof

The **Palace of Jodh Bai**, wife of Jahangir, was more likely used by Akbar's chief wife, Sultana Rakiya, who was also his first cousin The entrance is on the E. from the open space in front of the *Record Office* It is a quadrangular building 232 ft by 215 ft The courtyard within has reception rooms on the N, S, and W sides, connected by a flat-roofed corridor partly closed by stone walls The room on the W is more ornate than the others, and in the rear wall is a fireplace There are chambers above, and those on the N and S sides rise to two storeys; they are gable-roofed and ornamented with blue enamelled tiling, recalling the Man Mandir Palace of Gwalior (p 182) At the angles the chambers are surmounted by cupolas, originally painted. Overlooking Miriam's garden is a small projecting room, the walls of which are entirely composed of beautiful stone lattice work From the mezzanine floor on the N. side a closed passage leads to a garden abutting on the waterworks, beside which a gallery (now in ruins) passed to the N side of the Sarai near the Hiran Minar. In the passage, and just before the garden is reached, is a very fine stone screen beneath a small cupola.

The **Dargah Mosque** lies S.W of the Jodh Bai Palace The E gate, called the Badshahi, or "royal" gate, opens into the quadrangle, which measures 433 ft by 366 ft To the right is the Tomb, or Dargah, of Shaikh Salim Chishti, a descendant of the Pir Shakkar Ganj, who is buried at Pak Pattan (*see* pp 218 and 393) It is surrounded by marble geometrical lattice-work screens, the outer entrance doors also being of marble The canopy over the tomb of the saint is inlaid with mother-of-pearl, no longer adorned with ostrich eggs over it On the cenotaph is written the date of the saint's death (1571) and the date of the completion of the building, (1580), "May God hallow his tomb! —the beloved helper of the sect and its saint, Shaikh Salim, whose miraculous gifts and propinquity to the Divine Being are celebrated, and by whom the lamp of the family of Chishti is illuminated Be not double-sighted, looking to the transitory self, as well as to the everlasting Deity The year of his decease is known throughout the world" [1] The brackets which support the dripstone or eaves of the tomb are copies of those in the mosque of the stone-cutters (below) Childless women, both Hindu and Muslim, resort to the tomb and pray the saint to intercede in their favour On the N of the quadrangle is also the tomb of Islam Khan, surmounted with a cupola, he was the grandson of the saint and Governor of Bengal.

The **Mosque** proper, on the W., is said to be a copy of the one

[1] All the inscriptions here may be found in the *Miftah ul-Tawarikh*, by John Ellis, out of print

at Mecca It is about 70 ft. high, and very beautiful. It consists of three interior square chambers surrounded by rows of lofty pillars of Hindu type. At the N. and S ends are screened aisles. Outside a door at the back of the mosque, in an enclosure on the right, is an infant's tomb, said to be that of the saint's son, whose life was sacrificed at the age of six months in order that Akbar's son (Jahangir) might live when born

In the S. wall the **Gate of Victory, Buland Darwaza** ("high gate"), towers to the height of 176 ft Fergusson expresses the opinion that when looked at from below its appearance is noble beyond that of any portal attached to any mosque in India, perhaps in the whole world The grandeur of this great height is increased by a great flight of steps on the outside [1]

In the archway is an inscription on the left hand going out, which says that the "King of Kings, Shadow of God, Jalal-ud-din Muhammad Akbar, the Emperor, on his return from conquering the kingdoms of the S. and Khandesh, formerly called Dhandesh, came to Fatehpur in the 46th year of his reign (corresponding to 1601 A D), and proceeded from thence to Agra" On the opposite side is inscribed "Isa (Jesus), on whom be peace, said 'The world is a bridge, pass over it, but build no house on it The world endures but an hour, spend it in devotion'" The doors of this great gateway are studded with iron shoes, affixed by the owners of animals, who implore the prayers of the saint for their recovery

[1] The gate and shrine are specially noticed by the traveller William Finch, who visited Fatehpur-Sikri in 1610

To the W. of the steps is a large well, into which boys and men used to spring from the walls from heights varying from 30 ft. to 80 ft , but the practice has been prohibited A **Mela**, or fair, commences on the 20th of *Ramzan*, the anniversary of the saint's death, and lasts for eight days In front of the steps are some **Turkish baths**

W of the mosque, and outside the quadrangle, is the old **Mosque of the stone-cutters**, where Shaikh Salim lived in a cave covered by a room. (None but Muslims may enter) In a portico on the right the saint taught his disciples. The stone-cutters are said to have built it for him before the foundation of Akbar's city.

Outside the N wall of the Dargah are the houses of the brothers **Abul Fazl** and **Faizi**, the favourites of Akbar and followers of his new religion Faizi was appointed poet-laureate in 1588 and died in 1595 Abul Fazl, the "King's Jonathan," was murdered in August 1602, on his way to Agra from the Deccan, by Raja Bir Singh of Orchha, at the instigation of Salim (Jahangir). N E of the Record Office to the right of the road back to the Diwan-i-'Am, is the **Hakim's**, or doctor's house, and a very large and fine **Hammam**, the walls and ceilings of which are richly ornamented with stamped plaster-work

S of these, and adjoining the Bayana-Agra road, is a spacious and interesting **Baoli**, from which the baths and this part of the city were supplied Leading to a well at one end is a broad staircase enclosed on each side by rooms Around the well are chambers for Persian wheels.

ROUTE 14.—DELHI

[*Map faces page* 300]

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DELHI * (altitude 709 ft.; pop. 521,849 in 1941), the old Mughal capital, was by the Imperial Proclamation on the 12th December 1911, on the occasion of the Coronation Durbar, once more re-established as capital by H M King George V It is headquarters of the Army and of Central Command

A temporary city on the N of Delhi city was vacated on the completion of the new capital, on the S and W of the old city A detailed description of New Delhi is given on p 313

Delhi is famous for its jewellers, silversmiths, and embroiderers, and many artistic products of other parts of India will be found in its shops, the principal workers being situated in the centre and E end of the Chandni Chauk

The Central railway station (with five retiring rooms) lies in Queen's Road on the N side of the city, the Queen's Gardens separate it from the Chandni Chauk, which forms a street running E. and W from the Fort and Palace, on the Jumna, to the Fatehpuri Mosque, near the Lahore Gate Facing the S W. angle of the Fort is the great Jami Masjid In the N wall of the city are the Kashmir and Mori Gates, at the N W corner was the Kabul Gate (removed), next the Lahore Gate (removed), at the S W corner the Ajmer, on the S. the Turkoman and Delhi Gates Outside the N. wall lies the civil station, bounded on the E. by the river and on the W. by the Ridge, beyond which the Cantonment lay in 1857 S. of the walled city, which should properly be known by the name of Delhi-Shahjahanabad, the ruins of old cities and fortresses stretch for 12 m to the S —first Firozabad, then Indrapat, with the tomb of the Emperor Humayun and the Shrine of Nizam-ud-din Aulia beyond it, then, at a considerable interval farther to the S W, the ruins of the defences of Siri, Jahanpanah, and the Fort of Rai Pithora, in the citadel of which are situated the Qutb Mosque and Minar, 11 m from Delhi, and, 5 m E of the Qutb, the remains of Tughlaqabad and the fortress round it

The sights of Delhi cannot be comfortably seen in less than four or five days For those who can spare only three days to them, the following itinerary may be of use (map, p 301).—

1st Morning —Fort and Palace, Jami Masjid, Kalan Masjid, Jain Temple, and Chandni Chauk

Afternoon — Firozabad, Indrapat, and New Delhi.

2nd Morning —Visit sights N of the city in connection with the Mutiny and Siege

Afternoon —Drive by the mausoleum of Ghazi-ud-din to Jai Singh's Observatory and Safdar Jang's Tomb in New Delhi, by the tomb of Nizam-ud-din Aulia to that of Humayun, and so back past Indrapat.

3rd Day —Drive to Qutb (stopping *en route* to see the tank of Hauz Khas) Proceed to Tughlaqabad, and back by the Muttra Road to Delhi

Motor-cars can be obtained on hire A carriage takes longer but gives better opportunity for observation

The Architecture of Delhi

The buildings in and round Delhi may be conveniently classi-

fied as follows, according to their dates and styles. The so-called early Pathan style is really Turki, but the old nomenclature is generally followed —

(1) Early Pathan, 1193-1320

The Qutb Mosque and Minar—the tomb of Altamsh, the Alai Darwaza (p 310) and the Khizri or Jamaat Khana Mosque at Nizam-ud-din (p 304)

At first adoption and adaptation of Hindu materials and style to Saracenic motifs and requirements, then, developments of elaborate and beautiful decorative features from Hindu prototypes with true arches and domes rising from pendentives

(2) Middle Pathan, 1320 1414

Earlier style —Tughlaqabad and tomb of Tughlaq Shah (p 312)

Later and severer style — Kalan Masjid of Delhi (p 295), mosque of Kotla Firoz Shah (p 301) Qadam Sharif (p 297), ruined buildings on the Ridge (p 299), Hauz Khas tomb (p 306) mosques of Nizam-ud-din, Begampur and Khirki (pp 304, 306, and 312)

First buildings of local stone, or of red sandstone with sloping walls marble dressings being sparingly used then buildings with sloping walls of stone and mortar plastered all over and borne by rough columns of simple rectangular stones mosques generally built on high raised platforms

(3) Later Pathan, 1414 1556

Tombs of Saiyad and Lodi Kings (p 305), Purana Qila and Mosque (p 302), Jamali Mosque (p 311), tomb and mosque of Isa Khan (p 304)

Buildings usually with fine domes, and decorated with coloured marbles and tiles, and in some cases inside with fine plaster ornamentation

(4) Mughal, 1556-1660.

Earlier — Tomb of Humayun (p 302), tomb of Azam Khan (p 305)

Middle Period —Fort and Palace of Delhi (p 292), Jami Masjid, Delhi (p 294) Fatehpuri Masjid, Delhi (p 297)

Later decadent style —Zinat-ul-Masajid Mosque (p 294), Moti Masjid at Mahrauli (p 311), Sonehri Masjids in Chandni Chauk (p. 296) and of Javed Khan (p 294) mosque tomb, and college of Ghazi-ud-din Khan (p 296), tomb of Safdar Jang (p 305)

Buildings at first of red sandstone with marble dressings, restrained decoration In the middle period white marble increasingly used decoration more free, domes assume bulbous form, and lofty minarets prominent In the late Mughal style, tendency to over elaboration with florid decoration Buildings are in the charge of a Supdt Arch Survey

History.[1]—Though the country round Delhi is connected with the early history of India, as recorded in the *Mahabharata*, little is known prior to the Muslim conquest in 1193 A D According to tradition, a city called Indraprastha was founded by a king called Yudhishthir, and the fort of Indrapat also called Purana Kila, or Old Fort," stands, perhaps on the site although excavations have revealed nothing which can be identified as ancient The exten-

[1] Those interested in the history and archæology of Delhi will find the fullest details in *The Seven Cities of Delhi*, by Sir Gordon Hearn (Thacker 2nd Edition 1928)

sive ruins lying S. of modern Delhi, and covering an area of about 45 sq. m., are the remains of many forts or cities The oldest are the Hindu forts of Lal Kot, built by Anang Pal Tomar in A D. 1052, and of Rai Pithora Prithvi Raja Chauhan, built about A D. 1180 These two forts, the two Asoka pillars, and the iron pillar at the Qutb are the only remains of the Hindu period, with the exception of the Suraj Kund and the Arangpur *bund*, an embankment, 2½ m S W of Adilabad

The earliest Muslim cities were Siri, built by 'Ala-ud-din in 1304 A D , Tughlaqabad, built by Tughlaq Shah in 1321 A D , and Jahanpanah, enclosed by Muhammad Tughlaq, about 1325 A D Subsequently Firozabad was constructed by the Emperor Firoz Shah Tughlaq, and the Purana Qila was founded and built by Humayun and Sher Shah This new Delhi was not favoured by the Emperors Akbar and Jahangir, and the walled city dates from the commencement of the fort by Shah Jahan in 1639, whence it was called Shahjahanabad

Delhi has been often captured It was sacked by Timur, the Mughal, in 1398; by Nadir Shah, the Persian, in 1739, and by Ahmad Shah Durani, the Afghan, in 1756 On the 10th March 1739 the small Persian garrison was massacred On the 11th he gave his troops, who had been summoned from the encampment outside the city, orders for a general massacre From sunrise till 12 o'clock Delhi presented a scene of appalling carnage. The Mughal Emperor Muhammad Shah then interceded for the people Nadir Shah replied, "The Emperor of India must never ask in vain," and commanded the massacre should cease. A vast multitude of persons had, however, perished, and Nadir Shah carried with him from Delhi the famous Peacock Throne (since broken up), and the Koh-i-nur diamond

In 1771 the Mahratta Chief Mahdo Rao Scindia, captured Delhi, and the Mahrattas held it till September 1803, when General Lake defeated Louis Bourquien, commanding troops of Daulat Rao, gaining possession of Delhi and of the family and person of the King Shah Alam In October 1804 Delhi was besieged by the Mahratta Jaswant Rao Holkar, but was successfully defended by Colonel William Burn (p 297) From that time to 1857 the old capital of India remained in the possession of the British, although the descendants of the Mughal were allowed some show of royalty The last King, Bahadur Shah, succeeded in 1837, and was about eighty years old when the Mutiny broke out With his death at Rangoon, in 1862, the Mughal dynasty disappeared Till 1857 Delhi and the surrounding districts as far as Palwal Gurgaon, Hissar, and Karnal, were under the administration of the N W P (now the United Provinces of Agra and Oudh), but in 1858 they were transferred to the Punjab A Municipal Committee was formed in 1863

The Delhi Province

As a result of the changes announced in 1911, the Chief Commissionership of Delhi was constituted (without a Legislative Council) on the 1st October 1912 The area of the Delhi Province, which (like the District of Columbia) is immediately under the authority of the Governor-General, is 573 sq m Included within its boundaries are 65 villages formerly belonging to the Meerut District of the United Provinces The

headquarters of the former Commissioner of Delhi have been transferred from Delhi to Ambala

The Mutiny, 1857.

The principal events of the great mutiny of the Bengal army in 1857 centred originally round, Delhi

On the 10th of May 1857 there was in the large Cantonment of Meerut, 42 m N W of Delhi, a British force consisting of a battalion of the 60th Rifles, the 5th Dragoon Guards (Carabineers), and a large force of Artillery, though only two field-batteries were fully equipped The Bengal troops were one regiment of Cavalry (the 3rd) and two regiments of Infantry (the 11th and 20th)—in all about 2500 strong

While the Queen's troops were at church, unarmed, on the evening of that date, Sunday, the troopers, and after them the Infantry, broke into mutiny, and released eighty-five men of the 3rd Cavalry who had been imprisoned the previous day The mutineers started unpursued for Delhi, where there were three Bengal regiments of Infantry (the 38th, 54th and 74th) and a battery of Field Artillery, but no British troops Early next morning, some troopers called upon the King from below the palace walls, but he declined to admit them They made their way into the city and attacked the civil officers, who had received news of the outbreak at Meerut, and were attempting to dissuade the mutineers from entering These officers, the Commissioner (Mr Simon Fraser), the Collector (Mr Hutchinson), and Captain Douglas, Commandant of the Palace Guard, were compelled to fall back into the Fort, and were there shortly afterwards murdered.

The 54th Regiment was ordered down from the Cantonment, but at the Kashmir Gate most of the officers were met and shot down by the troopers, and the men refused to act—an example followed by the 74th Regiment, which was sent down later

Meanwhile the officer in charge of the Arsenal, Lieutenant Willoughby, forewarned, made a desperate attempt with his subordinates to hold out until aid should arrive from Meerut. When defence was no longer possible, he blew up a magazine and managed to escape to the Kashmir Gate with some others After the explosion the men of the 38th and others there broke out into open mutiny The Europeans in the Cantonment, who had collected at the Flagstaff Tower were then compelled to take to flight towards Karnal Every vestige of British power had disappeared and the King assumed authority

Measures were at once taken by General Anson, the Commander-in-Chief of the Bengal army, at Simla, to collect a force for the recapture of Delhi, and by Sir John Lawrence and the officers of the Punjab to anticipate the mischief of further mutiny The troops were unprepared and siege guns were at Phillaur, but on the 5th June they reached Alipur, 10 m from Delhi, under the command of Major-General Sir H Barnard from Ambala (General Anson having died of cholera at Karnal on 27th May) The Ambala force was then joined by one from Meerut, under Brigadier-General Archdale Wilson, who had defeated the rebels twice near Ghaziabad (p 328)

The force found the rebels well posted and supported by thirty guns 6 m N of Delhi, at Badli-ki-sarai, on 8th June General

Barnard gained a complete victory. The result was to give the British possession of "the Ridge" (p. 298).

"The tents of the British were pitched a little to the rear of their old houses, behind the left and centre of the Ridge, obliquely to the front of attack, and effectually concealed from the besieged. The position on the extreme right invited attack It was surmounted by an extensive building known as Hindu Rao's House [1] A strong body of troops was posted here and in an old observatory near it About 800 yds. to the N. of Hindu Rao's House, and on the Ridge, was an old mosque, and again 800 yds to the N was the Flagstaff Tower, a double-storeyed circular building—a good post for observation, and strong enough to afford shelter to troops At these four points General Barnard established pickets supported by guns Below Hindu Rao's House, on the right flank, was the suburb of Sabzi-mandi, which, with its houses and walled gardens, afforded shelter to the enemy, and was, in fact, the key of the English position. Beyond Sabzi-mandi, towards the Kabul Gate, were the suburbs of Kishanganj, Trevelyanganj, Paharipur, and Teliwara—all strong positions, which covered the enemy when they advanced to the attack, but were too near the city walls for us to occupy Opposite the mosque picket, to the E., was Metcalfe House, on the banks of the Jumna, with substantial outbuildings, and a mound in the rear, which seemed to recommend it for occupation Between it and the city was an old summer palace of the Emperor, the Kudsia Garden, with lofty gateways and spacious courtyards, and in a line between the latter and Hindu Rao's House was Ludlow Castle, the house of the late Commissioner Simon Fraser" [1] General Barnard had a force of about 3000 British, one Gurkha battalion, the Corps of Guides, the remnant of certain Bengal regiments, and twenty-two guns. At first it was intended to assault the city by night, but, as failure would have been disastrous, it was considered best to delay till the expected reinforcements had arrived Between the 12th and 18th June the rebels attacked the British position four times in front and rear Again on the 23rd, the anniversary of Plassey, they attacked fiercely, having been reinforced by the mutineers from Nasirabad, the British by that time had received an additional 850 men, who just about replaced casualties

On the 24th Colonel Neville Chamberlain arrived with the 8th and 61st Foot, the 1st Punjab Infantry, a squadron of Punjab Cavalry, and four guns, raising the British strength to 6600 The rebels also received an accession of about 4500 from Bareilly.

On the 5th July General Barnard died of cholera, and was succeeded by General Reed from Peshawar.

On the 9th and 14th of July fierce engagements were fought on the right of the British position, near Hindu Rao's house, in and about the Sabzi-mandi, in which 25 officers and 400 men of our force were killed and wounded

On the 17th of July General Reed, owing to illness, resigned the command to Brigadier-General Archdale Wilson The besieging force was in great difficulties the Adjutant-General and Quartermaster-General lay wounded in their tents, and the rebels had attacked so often, and with such

[1] Hindu Rao was a brother of Baiza Bai, widow of Daulat Rao Scindia of Gwalior He settled at Delhi and died there in 1855

[1] The best account of the Siege of Delhi is Captain (afterwards Field-Marshal Sir Henry) Norman's Narrative Those who desire a concise account, without military technicalities, cannot do better than refer to Holmes' *Indian Mutiny* (Macmillan, 1904).

obstinacy, that in fact the British were the besieged and not the besiegers. On the 18th of July the rebels made another sortie, which was repulsed by Colonel Jones of the 60th Rifles. The Engineer officers now cleared away the walls and houses which had afforded cover, and connected the posts in the Sabzi-mandi with the main pickets on the Ridge After this there were no more conflicts in the Sabzi-mandi On the 23rd of July the enemy streamed out of the Kashmir Gate, and endeavoured to establish themselves at Ludlow Castle They were driven back, but with severe loss, from guns well served by the Indian gunners

Reinforcements were now on their way from the Punjab, commanded by Brigadier-General John Nicholson On the 7th of August he stood on the Ridge, having come on in advance of his column of 2500 men, which arrived on the 14th [1] On the 25th he marched out to the S.W. towards Najafgarh with a strong force to attack the mutineers, who had moved to intercept the siege train coming from Ferozepore The march was a difficult one, in heavy rain and through deep mud He found the mutineers in three bodies, occupying two villages and a garden in front, all protected by guns. Crossing a ford where the water was breast-high, Nicholson, at the head of the 61st Foot and the 1st Bengal European Fusiliers, stormed the garden and captured the guns, but the sepoys fought well Those who survived made for the bridge over the Najafgarh Canal, and fled to Delhi, 800 were killed and thirteen guns were captured General Nicholson blew up the Najafgarh Bridge, and returned to camp next day.

[1] Between 15th and 22nd August Lieutenant Hodson made a successful cavalry raid to Rohtak, and cut up and scattered the rebels there

On the morning of the 4th of September the siege guns, drawn by elephants, as was then usual, with an immense number of ammunition wagons, reached the camp On the 6th the rest of the 60th Rifles from Meerut marched in On the 8th the Kashmir contingent arrived, with Colonel R. Lawrence at their head Many, and foremost Nicholson, chafed at the delay which occurred in storming Delhi The responsibility of the attack rested with General Archdale Wilson, who had thus stated the magnitude of the enterprise in a letter to Colonel Baird Smith, commanding the Engineers, on the 20th of August: "Delhi is 7 m in circumference, filled with an immense fanatical population, garrisoned by fully 40,000 soldiers, armed and disciplined by ourselves, with 114 heavy pieces of artillery mounted on the walls, with the largest magazine of shot, shell, and ammunition in the Upper Provinces, besides some 60 pieces of field artillery, all of our own manufacture, and manned by artillerymen drilled and taught by ourselves, the Fort itself having been strengthened by perfect flanking defences, erected by our own engineers, and a glacis which prevents our guns breaching the walls lower than 8 ft from the top" General Wilson wrote that the chances of success were, in his opinion, anything but favourable, but that he would yield to the judgment of the Chief Engineer Many condemned his apparent reluctance to order the assault, but they have since acknowledged that the principles of warfare were upon his side

Investment was impossible. It was decided to concentrate the breaching guns on the Mori, Kashmir, and Water Bastions, with their connecting curtains This front was chosen because the fire of the Mori Bastion alone commanded the approach to it, and

because there was excellent cover to within a short distance of the walls. On the evening of the 6th of September a light battery,[1] consisting of six 9-pounders and two 24-pounders, under the command of Captain Remmington, was constructed on a spur of the Ridge to protect the operations On the night of the 7th the first heavy battery [2] was constructed at 700 yds. from the wall It consisted of two parts connected by a trench. The right portion held five heavy guns and a howitzer, the function of which was to demolish the Mori Bastion The left held four guns to silence the fire of the Kashmir Bastion. While darkness lasted the enemy only fired twice, but when the morning revealed the British plans, the rebels poured in a shower of shot and shell, but the British persevered in their work, and before sunset the rebel battery was silenced The British had lost 70 men in the trenches. The left section of their battery maintained a fire on the Kashmir Bastion during the greater part of three days, but at noon on the 10th it took fire, and the guns were of necessity withdrawn. By that time No. 2 Battery had been finished—the left section immediately in the front of Ludlow Castle, and the right section 90 yds to the S. of it [3] Both were within 600 yds of the city, the right section had seven howitzers and two 18-pounders, and the left section nine 24-pounders

This battery did not open fire till No 3 Battery was completed It was built in the Custom House, at 180 yds from the Water Bastion, on which it was to play. It was impossible to work in the day and difficult at night. A powerful mortar battery was also constructed in the Qudsia Garden. At 8 A.M. on the 11th of September the nine 24-pounders in the left section of No. 2 Battery opened with terrific effect on the Kashmir Bastion. The enemy replied, and severely wounded the battery commander, but their fire was silenced by No 2 Battery, aided by the mortars in the Qudsia Bagh The walls of Delhi began to fall, and whole yards of parapet came down At 11 A.M. on the 12th No 3 Battery unmasked and pounded the Water Bastion All through the 12th and 13th the roar of fifty heavy guns was heard day and night, without intermission On the 13th Alexander Taylor, of whom Nicholson said, "If I survive to-morrow I will let all the world know that Aleck Taylor took Delhi," announced that the breaches were practicable.

The arrangements for storming Delhi were forthwith made. The 1st column, under Nicholson, consisted of 300 men of the 75th Foot, 250 of the 1st Bengal Fusiliers, and 450 of the 2nd Punjab Infantry It was to storm the breach in the curtain near the Kashmir Bastion. The 2nd column, under Brigadier Jones, C.B., was to storm the breach at the Water Bastion, and it consisted of 250 men of the 8th Foot, 250 of the 2nd Bengal Fusiliers, and 350 of the 4th Sikhs The 3rd column, under Colonel Campbell, of the 52nd, was to assault the Kashmir Gate, and consisted of 200 men of the 52nd Foot, 250 of the Kumaon Battalion of Gurkhas, and 500 of the 1st Punjab Infantry The 4th column, under Major Charles Reid, who had all through held the post at Hindu Rao's house, was to enter the city by the

[1] This was known as the Sammy House Battery, and lies 400 yds E of the Mutiny Memorial

[2] The monuments marking the sites of this battery, 400 yds. to the E of the foot of the slope of the Ridge below the Mutiny Memorial, will be found inside the Police Lines, and behind a house to the N of these

[3] The two right guns of the left section of No 2 battery were commanded by Lord Roberts.

Lahore Gate. It consisted of 860 men of the Sirmur Battalion of Gurkhas, the Guides, and other corps, together with 1200 of the Kashmir Contingent The 5th column, the Reserve, was commanded by Brigadier Longfield, and consisted of 200 of the 60th Rifles (who joined after skirmishing in the assault), 250 of the 61st Foot, 450 of the 1st Punjab Infantry, 300 of the Baluch Battalion, and 300 of the Jind Contingent Besides these five columns, Colonel Hope Grant had 600 sabres of the 9th Lancers and Sikh Horse, whose duty it was to prevent sallies from the Lahore and Kabul Gates, but they could only sit their horses under a heavy fire

On the night of the 13th Lieutenants Medley and Lang explored the Kashmir breach, and Lieutenants Greathed and Home that of the Water Bastion The morning of the 14th was fine and still, but the guns had to reopen fire on the repaired breaches Nicholson laid his arm on Brigadier Jones's shoulder, and asked him if he was ready He then rejoined his own column, gave the order to storm, and the heavy guns ceased fire The Rifles sounded the advance, and the 1st and 2nd columns ascended the glacis The fire of the enemy was terrible, and the Engineers Greathed and Ovenden were the first to fall. The stormers, carrying the ladders, were led by Captain Baines and Lieutenant Metje When Baines reached the top of the Water Bastion only twenty-five men were left out of seventy-five. Both he and Metje were disabled The 1st column was divided into two sections Nicholson himself led one, and Colonel Herbert of the 75th the other. Nicholson was the first to mount the wall In the other section Lieutenant Fitzgerald, who was the first to ascend, was shot dead. Soon both sections of the 1st column had carried the breach near the Kashmir Bastion, and taken Main Guard. The 2nd column joined the 1st column. Both columns then proceeded along the inner side of the city wall to the Mori or Shah Bastion at the N.W angle, where the rebel gunners fought gallantly and were bayoneted at their guns The Kabul Gate was next taken As the enemy kept up a galling fire from the Lahore Gate, Nicholson collected a number of men to storm it. During the advance he found himself in a long narrow lane lined with marksmen on both sides Some of the enemy's guns were brought to bear, and the men fell fast Major Jacob, of the 1st Fusiliers, received a death-wound, Captain Greville and Lieutenant Speke were struck down The column wavered, Nicholson rushed forward, his lofty stature rendered him conspicuous, and he was shot through the body In spite of his remonstrances he was carried to the rear, and the columns fell back to the Kabul Gate He died ten days later

The 3rd column had been detailed to enter the city through the Kashmir Gate, which was to be blown open by Lieutenants Home and Salkeld, Sergeants Carmichael and Smith and Corporal Burgess [1] Home, with Bugler Hawthorne, was first down into the ditch He planted his bag, but as Carmichael advanced with his, he was mortally wounded Smith then advanced, and placing his dying comrade's bag as well as his own, prepared the fuses for ignition. Salkeld was ready with a slow match, but as he was lighting it he was shot through the leg and arm, and, falling, called on Burgess to take the

[1] The real name of this gallant man, who had enlisted as Frank Burgess, was Joshua Burgess Grierson

match. Smith was in the act of giving him a box of lucifers when Burgess also fell with a bullet through his body. Smith was now alone, but he had struck a light, and was applying it when a portfire went off in his face There was a thick smoke and dust, then a roar and a crash, as Smith scrambled into the ditch There he placed his hand on Home, who said he was unhurt, and having joined the column, went forward. The doors, although shattered, were not entirely destroyed, but Home ordered Hawthorne to sound the regimental call of the 52nd, which he repeated three times, and the 3rd column passed through Smith then obtained stretchers, and had Burgess and Salkeld carried to the camp, but both of them died—Burgess on the way, and Salkeld a month later [1] The story of Salkeld, mortally wounded, handing over the portfire and bidding his comrade light the train, will always stand out among the many heroic episodes connected with the storm of Delhi

The 3rd column, which was immediately joined by the Reserve, pushed across the Queen's Garden and Chandni Chauk to the Kotwali, under the guidance of Sir F T. Metcalfe, and then down the Dariba to the Jami Masjid This, however, was strongly defended, and as there were no guns or means of blowing in the gates, it was compelled to fall back In spite of the losses of the assault (66 officers and 1100 men), the British force maintained itself in the N.W. corner of the city, as far S. as the College, and gradually captured the whole city. On the 16th the Arsenal was taken, and posts were established from it to the Kabul Gate during the 17th and 18th, the troops working from house to house under cover. On the 19th the Burn Bastion, between the Kabul and Lahore Gates, was seized, and on the next morning the Lahore Gate was captured, and cavalry, entering by the Delhi Gate on the S, occupied the Jami Masjid On the 20th also the Fort was taken, very little opposition being offered by the few rebels left in it On the 21st the King was captured by Major Hodson at Humayun's tomb, and on the following day Hodson received the surrender of the King's sons at the same place, and shot them near the Delhi Gate On 24th September a column under Colonel Greathed marched S from Delhi, and on the same day Brigadier-General Nicholson was buried in the Kashmir Gate Cemetery

The number of troops engaged on the Siege of Delhi from first to last was 9866, of which no less than 3837 were killed or died of wounds or were wounded These included 46 European officers killed and 140 wounded Three out of the four officers who commanded the assaulting columns were disabled The 1st Bengal Europeans lost nine officers, and the casualty list on the day of the assault was 1104 men and 66 officers, or about two out of every nine The endurance and steady courage of the Delhi Field Force during the summer and rainy season of 1857 were remarkable

[1] Home, Smith and Hawthorne received the Victoria Cross Lieut Philip Salkeld died of his wounds on 11th October 1857 Lieut Duncan Charles Home was killed by an explosion at Malagarh on 29th September 1857, Sergt. John Smith died at Jalandhar in 1864; and Bugler Robert Hawthorne, of the 52nd Light Infantry, died at Manchester in 1879 Nor must mention be omitted of Havildars Madhu and Tilak Singh of the Bengal Sappers and Miners, who were wounded, and Sepoy Ram Nath, who was killed.

Delhi and its Surroundings

For the convenience of sight-seeing, Delhi and the adjoining country may be divided as follows:

(1) The city, including the old Arsenal, the Fort and Palace, the Jami Masjid and Kalan Masjid, and the Chandni Chauk

(2) The tract lying N. of the city walls, in which the principal incidents of the Siege of Delhi and the Imperial Assemblages took place

(3) The tract lying immediately S. of the city, and including the ruins of Firozabad, the Purana Qila, the Mausolea of the Emperor Humayun and Nawab Safdar Jang, and Nizam-ud-din Aulia, the Saiyad and Lodi tombs, and Jai Singh's Observatory

(4) The tract lying still farther S., including the tomb of the Emperor Firoz Shah at Hauz Khas, Siri, Jahanpanah, Qila Rai Pithora, the citadel of Lal Kot, with the Qutb Minar and Mosque, and Tughlaqabad, 5 m. to the E. of these

(5) The buildings of the new capital, included in (3)

(1) The City

On the outer face of the **Kashmir Gate** is a memorial tablet of the Explosion Party. The first was erected (1876) by Lord Napier of Magdala, this one by Lord Minto in 1910. On the inside the outlines of the Main Guard are still traceable, on the N. side a staircase leads on to the walls just above the main breach, and from here and from the Kashmir bastion a view is had along the vistas cut to the points where No. 1 and No. 2 Siege Batteries were established. E. of the Main Guard are the District Courts and the second breach at the side of the Water or Moira Bastion.

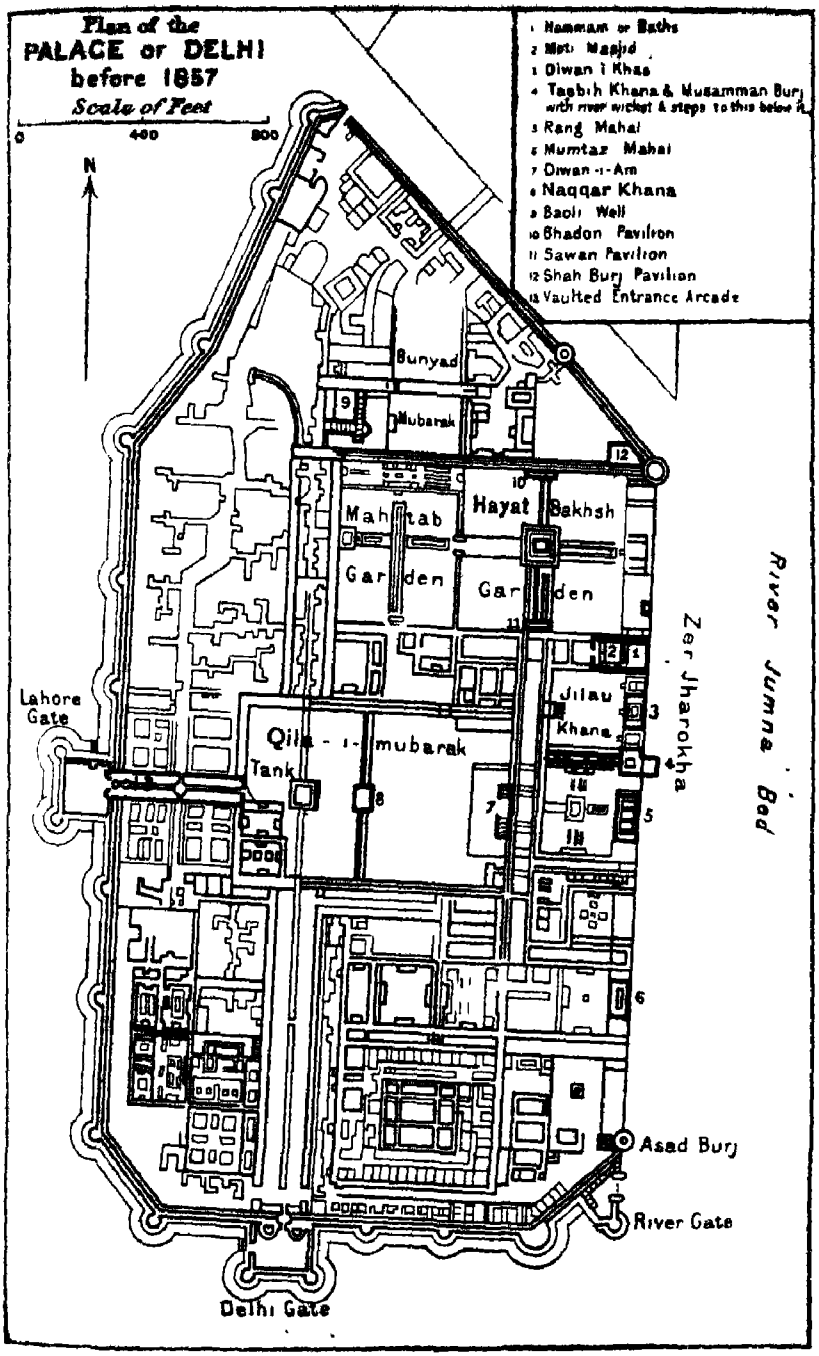
Inside the Gate is **St James' Church**, built by Colonel Skinner, C.B. (*d.* 1841), whose residence stood on the opposite side of the clear space here, in the churchyard are the old dome-cross bearing the marks of bullets fired at it in 1857, a memorial cross to the victims of the Mutiny, and the graves of the Skinner family and of Mr William Fraser, murdered in 1835, and of Sir T. Metcalfe. Inside the church are a number of memorial tablets.

The Cambridge Mission College has been moved north of the Ridge. On the left, the High School was in 1857 the Delhi College, and before that the Residency, dating from the time of Sir D. Ochterlony. a portion of the building was formerly the library of Prince Dara Shikoh. The road now divides into two branches with a long grass plot in the centre. At one end of the latter is the granite memorial of the officers of the Telegraph Department who fell in 1857.

Further along the same plot stand the gateways of the old **Magazine**. Over the central gate is a memorial of Lieutenant Willoughby and the eight heroic men [1] who shared in its defence; in the S.E. corner at the back are the steps by which the survivors escaped. The road now passes the old cemetery (closed 1855) on the left, and beyond the arch of the railway bridge the main thoroughfare (which branches to the railway station on the right, and on the left to the ghats and the Jumna bridge) ascends the slope in front to the **Mughal Fort and Palace**, built by the Emperor Shah Jahan between 1639-48.

There are two fine gates to the Fort, as at Agra. The one in the centre of the W. side at the E. end of the Chandni Chauk

[1] Conductors John Scully and G. D. Shaw, Sub-Condr. W. Crowe, and Sergts. Benjamin Edwards and Peter Stewart were killed by the explosion; Lieut. G. D. Willoughby was murdered on 13th May while making his escape from Delhi. Lieut. George Forrest, V.C., the father of Sir George Forrest, the historian, died in 1859, and Lieut. W. Raynor, V.C., in 1860. The last survivor of "The Devoted Nine" was Conductor John Buckley, V.C., who died in England in 1876.


Plan of the
PALACE or DELHI
before 1857
Scale of Feet
0
400
800
N
1 Hammam or Baths
2 Moti Masjid
3 Diwan I Khas
4 Tasbih Khana & Musamman Burj with river wicket & steps to this below it
5 Rang Mahal
6 Mumtaz Mahal
7 Diwan-i-Am
8 Naqqar Khana
9 Baoli Well
10 Shadon Pavilion
11 Sawan Pavilion
12 Shah Burj Pavilion
13 Vaulted Entrance Arcade
Bunyad
Mubarak
Mahtab Garden
Hayat Bakhsh Garden
Jilau Khana
Qila - i - mubarak
Tank
Lahore Gate
Delhi Gate
Asad Burj
River Gate
Zer Jharokha
River Jumna Bed

is called the Lahore Gate, and the other at the S.W corner, the Delhi Gate, leads to Old Delhi A good view of the magnificent red sandstone wall (whence the name Lal Kila or Red Fort) is obtained by walking along the ditch to the N W corner, where the two bridges between the Fort and the Salimgarh may be seen, also the traditional site of the Dasaswamedh and Nigambodh ghats, where the Imperial Horse sacrifice was performed by Yudhishthir (Introd p lviii), and the sacred Vedas were recovered from the bottom of the ocean

Entering the forework, erected by the Emperor Aurangzeb, in front of the **Lahore Gate**, and passing under the archway, the visitor will find himself under a vaulted arcade (see plan of Fort and Palace). From the octagon in the centre of it a gateway to the left conducts to the steps leading up to the rooms (now private quarters) over the Gate At the foot of these, on the 11th May 1857, was killed the Commissioner of the Division, and in the rooms above were murdered the wounded Collector, the Commandant, the Chaplain, and two ladies The vaulted arcade ends in the centre of the outer court, which measured 540 ft. by 360 ft., of which the side arcades and central tank have been removed; round the edge of the tank were murdered, on 16th June 1857, some fifty Christians who had escaped the massacre of the 11th

In the E wall was the now isolated **Naubat** or **Nakkar Khana**, the band gallery of which is 100 ft by 80 ft., and here every one except Princes of the royal blood was required to dismount The carving of the flowers on the red sandstone dado of the gateway is unusually good The inner main court to which this gateway led was 540 ft. broad and 420 ft deep, and was also surrounded by arcade galleries, where the great feudatories used to mount guard This space has been cleared (1903-12) of military structures, the courtyard being now represented by a lawn, and the arcades by shrubberies, maintained by Government

On the farther side is the Hall of Public Audience, the **Diwan-i-'Am** (100 ft. by 60 ft.) The proportions of this hall with its columns and engrailed arches are extremely good The whole was originally covered with ivory polished chunam At the back in the raised recess was the throne of the Emperor Below it is the marble seat of the Wazir, and around it above are twelve inlaid panels executed by Austin of Bordeaux, including that of the artist as Orpheus, recovered by Lord Curzon from the S Kensington Museum. The hall was thoroughly restored by the care of Lord Curzon, and a Florentine, Sr. Menegatti, renewed (1909) the inlay work of the throne recess and the plaques of the arch to the W side of the throne Bernier gives a full account of the splendid appearance of the hall in the time of Aurangzeb

A gate on the N side of the hall led to the innermost court of the palace, and to the **Diwan-i-Khas**, or Hall of Private Audience, in which the peacock throne used to stand Tavernier records a minute description of the glories of this throne, carried off (1739) by Nadir Shah.[1] The following description is from Mr Beresford's

[1] The peacock throne is no longer in existence It was broken up when Nadir Shah was murdered in North-east Persia in 1747, and such fragments as survived were inserted in a seat or throne which may still be seen in the museum of the royal palace at Teheran (*Letter from Lord Curzon in The Times* of 10th September 1919)

Guide to Delhi "It was so called from its having the figures of two peacocks standing behind it, their tails being expanded, and the whole so inlaid with sapphires, rubies, emeralds, pearls, and other precious stones of appropriate colours, as to represent life The throne itself was 6 ft long by 4 ft broad, it stood on six massive feet, which, with the body, were of solid gold, inlaid with rubies, emeralds, and diamonds It was surmounted by a canopy of gold, supported by twelve pillars, all richly emblazoned with costly gems, and a fringe of pearls ornamented the borders of the canopy. Between the two peacocks stood the figure of a parrot, said to have been carved out of a single emerald."

The general effect has been spoilt by the removal after the Mutiny of the marble pavement in front of it and of the arcaded court which once enclosed it like the Khas Mahal at Agra (p 269) It measures 90 ft by 67 ft, and is built wholly of white marble, the dado of the interior walls and piers being inlaid with precious stones, the ceiling, which was once of silver, removed by the Mahrattas (1760), has been restored in wood supported by iron girders above At either end of the hall over the two outer arches, is the famous Persian inscription—

"Agar Fardaus bar ru-i zamin ast
Hamin ast wa hamin ast wa hamin ast"

"If there is a Paradise on the face of the earth,
It is this, oh! it is this, oh! it is this."

The Diwan-i-'Am has many historical connections—the presence of Nadir Shah the Persian, and Ahmad Shah the Afghan, the thanksgiving service of the Delhi Field Force on the 27th September 1857, the trial of the last King of Delhi in January and March 1858, the ball given to H R H the Prince of Wales by the Indian army in January 1876, and that on 6th January 1903, in honour of the coronation of the late King Edward VII. The Diwan-i-Khas has seen the blinding (1788) of King Shah Alam by the brutal Ghulam Kadir, and the reception of Lord Lake after the Battle of Delhi in 1803.

N of the Diwan-i-Khas, connected by a shallow water channel, which also passed through the Royal Apartments, are the **Royal Baths** These consist of three large rooms, the flooring inlaid with *pietra dura* work, and crowned with domes They were lighted by windows of coloured glass in the roof In the centre of each room is a fountain, and in the wall of one of them a reservoir of marble

Opposite to them, to the W, is the **Moti Masjid**, or the "Pearl Mosque," of white and grey-veined marble A bronze door covered with designs in low relief leads to the courtyard, 40 ft. by 35 ft The mosque proper has three arches, and is divided into two aisles The walls are decorated with low reliefs It was built in 1659 A D by Aurangzeb, and cost Rs 160,000 originally the domes were covered with gilded copper plates

To the N of these buildings lies the **Hayat Bakhsh**, or Life-giving garden-court, 200 ft square, with the Shah Burj pavilion in the N E corner and the Bhadon and Sawan Pavilions on the N. and S sides The tank and water channels have been restored through the influence of Lord Curzon Beyond these the road to the N leads to the Salimgarh, built by Salim Shah in A D 1546. W of the above garden was another called the Mahtab (moon) Bagh, and near what was the N W corner of it is a picturesque baoli or tank Nothing else remains of the courts and beautiful buildings of the old palace which were removed after 1857

In the river-bed below the Diwan-i-Khas is the Zer-Jharokha, or Beneath the Lattices Here the troopers from Meerut called up to the King on 11th May, and from the terrace above, between the hall and the **Royal Private Apartments**, Captain Douglas, the Commandant of the Palace Guard, ordered them to proceed South of the city, but they got in by the Rajghat Gate

These consist of three sets of rooms and of a tower called the Musamman (octagonal) Burj, projecting over the river In the open central bay is an alabaster panel with a representation of the heavens round the Scales of Justice, Mizan-i-adl, and in others will be found beautiful decorations and pierced grilles Two of the smaller rooms contain articles representative of those in daily use by Mughal Emperors S of these apartments is the **Rang Mahal**, or Painted Palace, the residence of the Chief Sultana, once used as a mess-house; the marble water channel (see below) runs through this also

Farther S is the **Mumtaz Mahal**, the Delhi Museum of Archæology,[1] formed (1868) as a Municipal **Museum**, moved to the Naubat Khana (1909), and here in 1911 It contains Mutiny relics, views and plans of Delhi in former times, and a collection of Mughal miniature portraits.

The S E bastion is the Lion Tower On the S W is the **Delhi Gate** Near it, on the right, the King of Delhi was imprisoned after September 1857. Between the inner and outer gates stand two large stone elephants (p. 154), replaced at the expense of Lord Curzon Beyond the Southern glacis of the Fort, on which a cross marks the site of an old cemetery, was an old Cantonment of Darıaganj The Darıaganj area is bounded on the W by the Faiz Bazar leading to the Delhi Gate of the city, near the Khairati Gate N E is the **Zinat-ul-Masajid Mosque**, built by a daughter of Aurangzeb in 1707 A house in the Cantonment numbered 5, S of the road to the Delhi Gate, was defended for 48 hours after 11th May 1857 by a party of Europeans, of whom only two escaped

From the Delhi Gate of the Fort the Khas Bazar once led to the **Jami Masjid**, and on the open space stood private palaces In the Southern portion of this open space and E of the Jami Masjid is Edward Park, in the centre of which an equestrian statue of King Edward VII was unveiled (1911) by King George V S is the Empress Victoria Memorial Hospital for women, and to the W the Dufferin Municipal Hospital In front of the Delhi Gate is the graceful **Sonehri Masjid** of Javed Khan, built in 1751

Fergusson wrote of the **Jami Masjid** as follows: "The Jami Masjid at Delhi, begun in 1644, but not finally completed till 1658, is not unlike the Moti Masjid in the Agra Fort in plan, though built on a very much larger scale, and adorned with two noble minarets, which are wanting in the Agra

[1] See *Guide to the Delhi Fort Buildings and Gardens* (Archæological Survey of India), by E Gordon Sanderson, 1914, obtainable from the Custodian, Archæological Area, and *Catalogue of the Delhi Museum of Archæology*, 1913, by the same author, from the Gallery Assistant in the Museum See also, *Astronomical Instruments in the Delhi Museum*, by G. R Kaye, Calcutta, 1911.

example, while from the somewhat capricious admixture of red sandstone with white marble it is far from possessing the same elegance and purity of effect It is, however, one of the few mosques, either in India or elsewhere, that is designed to produce a pleasing effect externally. It is raised on a lofty basement, and its three gateways, combined with the four angle towers and the frontispiece and domes of the mosque itself, make up a design where all the parts are pleasingly subordinated to one another, but at the same time produce a whole of great variety and elegance The mosque itself is 201 ft in length by 120 ft, and is flanked by two minars 130 ft high, formed in alternate vertical stripes of sandstone and white marble, and crowned by light marble pavilions'

The three gateways are approached by broad flights of steps. As of old, the great doors of the main gateway on the E were opened only for the Mughal Emperor, so now they are opened only for the Governor-General, but there is a wicket in the doors These are massive and overlaid with brass arabesques half an inch thick. Visitors entering any part of the floor space of the mosque are required to wear overshoes of canvas provided

Inside is a quadrangle, 325 ft square, in the centre of which are a marble basin and fountain. Round three sides of the quadrangle runs an open sandstone cloister, 15 ft wide, with pillars of the same material. The inscription on the front of the mosque gives the date in Arabic as A D. 1658, the year in which Aurangzeb deposed his father, Shah Jahan; it is found in the two words "Ya Hadi," "O Guide," on the centre panel The three white marble domes are relieved by thin vertical lines of black marble The two minarets are reached from the S gate over the roof of the arcade. At the N E corner of the court is a pavilion in which are placed relics of the Prophet Muhammad. The view of the Fort walls from the galleries on the E side of the court is very fine; also that of the back wall from the W On the E side is the tomb of a Muslim leader, Maulana Shaukat Ali (1873-1938)

From the Jami Masjid the Chaura Bazar leads S W to the Qazi Hauz and the Lal Kuan Bazar, which extends up to the Fatehpuri Masjid. S from the Hauz Qazi one main street runs past the Kalan Masjid to the Turkman Gate, and another W to the Ajmer Gate The **Kalan (Great) Masjid**, popularly known as the Kali (Black) Masjid, was once included within the limits of Firozabad, and was built by the Emperor Firoz Shah in 1386 The outside consists of two storeys, of which the lower, forming a kind of plinth, is 28 ft high, the total height to the top of the battlements being 66 ft The walls, which are very thick, have in the upper storey openings, with red stone screens, much mutilated the arcades are supported by square columns of stone There is a stern look about this sombre building, the plan of which, Bishop Heber says, "is exactly that of the original Arabian mosques—a square court surrounded by a cloister, and roofed with many small domes of the plainest and most solid construction'

E of the mosque is the tomb of Turkman Shah, styled the "Sun of Devotees." He died in 638 A H = 1240 A D, in the time of Muizz-ud-din Bahram Shah. Near the Turkman Gate and inside

the walls is the S.P.G. Church of the Holy Trinity, built in 1904.

A little to the N. of this saint's grave, in the Bulbuli Khana, is the **tomb of Sultan Razíya**, daughter of the Emperor Altamsh, and the only Muslim Queen of India, who ruled from 1236 to 1240; she was killed in flight from a battle in which she sought to recover her throne. The mausoleum at the **Ajmer Gate**, enclosed in a modern horn-work (1805), was constructed by **Ghazi-ud-din Khan**, who was interred there in 1710. He was the father of the first Asif Jah of Hyderabad, whose son, Ghazi-ud-din (d. 1752), is buried here, and whose grandson, Ghazi-ud-din (Imad-ul-Mulk), played a prominent part in the decline of the Mughal empire. In addition to the graves standing in a small enclosure surrounded by panels of pale-coloured sandstone, some pierced and some carved with flowers, there are a mosque and a college, occupied by the Anglo-Arabic School.

Close to the Jami Masjid, on the N.W. side, is a **Jain Temple**, approached by narrow streets. It stands upon a high, walled platform, gained by narrow steps, and consists of a small marble court surrounded by a stucco colonnade, in front of the temple proper, which is surmounted by an oblong dome. Within the ceiling and walls are richly gilded, and are supported by two rows of small marble columns. In the centre of the temple is a pyramidal platform in three tiers, upon which rests the small figure of a Jain saint, seated beneath an elaborate ivory canopy. Fergusson draws particular attention to the exquisite device in the porch of filling in the back of the struts which support the architrave beneath the dome with foliated tracery.

To the N. the **Dariba** leads to the **Chandni Chauk**. The portion of this famous street between this point and the Fort was called the Urdu, or Camp.[1] On the N. side a large residence, which formerly belonged to the Begam Samru, is now occupied by the Imperial Bank of India. On the roof of an outhouse, Mr. Beresford, the manager of the Delhi Bank, defended himself and his family in vain on 11th May 1857. W. of the Dariba the Flower Market and the Jewellers' Market have been absorbed into the Chandni Chauk proper. Houses built both across and down it were removed, and the channel from the W. Jumna Canal, built by Ali Mardan Khan to supply the Palace, was covered over after the Mutiny. Opposite the S.E. gate of the Queen's Gardens is the **Kotwali**.

W. of the open space is the **Sonehri Masjid** of Roshan-ud-daula, on the platform of which Nadir Shah sat while the inhabitants were being massacred. On the left-hand side of the Kotwali is the Sisganj Gurdwara, a sacred place of the Sikhs, erected to mark the traditional site of the martyrdom of their *guru* Tegh Bahadur, by order of Aurangzeb. Farther down, on the same side of the Chandni Chauk, is the **Khuni Darwaza**, or Gate of Blood, where the massacre by Nadir Shah is said to have been stayed.

Opposite the Kotwali, on the site of the **Karawan Sarai**, built by **Jahanara Begam**, daughter of the Emperor Shah Jahan, and held by Bernier to be one of the wonders of Delhi, rises the **Northbrook Clock Tower**, while on the N. side of the street, between it and the

[1] The mixed language which grew up in the royal residence (*urdu-i-mukalla*, the sublime camp) was called *zaban-i-urdu*, the camp language, and became gradually known as Urdu.

Municipal Buildings, is a Statue of Queen Victoria, presented to his fellow-citizens by Mr James Skinner, grandson of the famous Colonel Skinner, C B. Between the Municipal Buildings and the main railway station are the Begam or Queen's Gardens, with a cricket ground, much frequented both by travellers by the railway and by townspeople In the gardens is situated the Public Library, erected in memory of the Viceroyalty of Lord Hardinge

The Chandni Chauk ends at the **Fatehpuri Mosque** constructed by Fatehpuri Begam, one of the wives of Shah Jahan, in 1650, it is built of red sandstone, and is surmounted by a single dome On the S side of the mosque a street leads to the Lal Kuan Bazar, and on the N side another leads to the **Lahore Gate** and the smaller Sarhandi Mosque, *erected by another wife* of Shah Jahan, in front of it Beyond are the quarters of Paharganj and Kishanganj (p 301)

On the crest of the Ridge is the Idgah (of Firozabad) and at the foot of the Ridge is the picturesque enclosure of the **Qadam Sharif,** or Sacred Foot, in which Prince Fateh Khan, eldest son of the Emperor Firoz Shah, was buried in 1373 The name is derived from the imprint of a foot of the Prophet Muhammad carved on a small slab preserved under water on the tomb

A road from the Fatehpuri Masjid past the W end of the Queen's Gardens and the Cambridge Mission Church leads to the Queen's road which skirts the N side of the gardens to the Kabul Gate. On the left side of the road, in a large house which once belonged to Nawab Safdar Jang, the **Cambridge Mission** is located. Besides the College and School under this mission, there is a large female Hospital at Tis Hazari, below the S point of the Ridge Farther on, just before arriving at the site of the **Kabul Gate,** a piece of the old wall has been left to mark the spot where **Brigadier-General Nicholson** was mortally wounded on 14th September 1857. The gate and main portion of the wall were demolished to make way for the Burn Bastion Road and the railway in 1904 Outside the gate is the Karol Bagh (1917)

(2) Tract lying N. of the City.

The Dufferin Bridge, crossing the railway from the Queen's road, leads to the Mori Gate and the Civil Station Outside the Mori Gate is a statue of General Sir Alexander Taylor (1826-1912) of the Bengal Engineers (see p 287) The site is not very appropriate The **Mori** or **Shah Bastion,** 200 yards to the W. of the gate, affords a fine view of the S end of the Ridge and of the N wall front to the Kashmir Gate

The walls of Delhi were built by Shah Jahan, but the towers were enlarged into bastions by the British about 1809, after the attack of the city by Jaswant Rao Holkar in October 1804. The repulse of 70,000 Mahrattas, with 130 guns, by Colonel Burn, with two and a half battalions of sepoys, was a most notable feat of arms, almost forgotten, like the Battle of Delhi in 1803 (p 283) On the right, just outside the Kashmir Gate, is the **Qudsia Garden,** and on the left the Nicholson Garden, with the statue of Brig -General Nicholson by Sir T. Brock, R A He is buried in the cemetery N of it The grave is 50 yds. to the right of the entrance, and bears the brief, soldierly inscription—

The Grave of
Brigadier-General JOHN NICHOLSON,
Who led the assault of Delhi, but fell
In the hour of victory
Mortally wounded,
And died 23rd of September 1857,
Aged 35 years

To the left of the path leading straight from the gate is the grave of Mr Hervey Greathed, Political Officer with the Force before Delhi, who died of cholera four days after the assault

N of the back wall of the cemetery is the right section of **No. 2 Siege Battery**. Passing, in the Qudsia Garden, the Flagstaff which bore the Royal Standard at the Coronation Darbar of 1st January 1903, the site of **No 3 Battery**[1] will be found to the S of the mosque, which formed part of the old Qudsia Palace, which apparently disappeared early in the 19th century, and that of the Mortar Battery to the left of the N entrance of the Gardens from the Alipur Road In the grounds of Ludlow Castle, the residence of Mr Simon Fraser in 1857, and then the Delhi Club (closed 1938), the left section of **No. 2 Battery** is close to the wall of the main road

In 1857, on the left of the road, was the **Telegraph Office**, of which the staff remained on the spot till late in the afternoon of 11th May. One member returned still later with an officer to send an official message to Ambala. The "practice messages" of the signallers really conveyed the news of the mutinies of Meerut and Delhi to Ambala, and so to Lahore.

A quarter of a mile farther on is a high mound, on the site of Timur's Camp (1398). This was the **Mound Picket**, and **Metcalfe House**, which formed the extreme left of our position before Delhi, lies 500 yds. E of it, on the bank of the Jumna The house, built by Sir T. Metcalfe between 1830 and 1840, was burnt by Gujars in 1857 Its ruins were acquired by Government in 1911, and the building was restored for use as a residence for various officials and members of the Legislature. A little farther on are the temporary Secretariat buildings, which are now occupied by Government Offices. The old Legislative Council Hall, in the centre of the block, serves as a Convocation Hall for the Delhi University, which was established by statute in 1922 as a teaching and residential University Three Colleges—St Stephen's (moved here), Hindu, and Ramjas—are affiliated, and some accommodation has been provided in the Ballroom of the Circuit House (see below) since 1933

The road now proceeds N for ¾ m., and then turns W. by the "Khyber Pass" through the Ridge, the northernmost outcrop of the Aravallis, the Ridge Road to the left leading past the graves of some officers of the 54th, killed on 11th May 1857, to the **Flagstaff Tower**, to which another steeper road leads direct from the S From the roof a complete view is obtained of the whole position before Delhi and of the encampment of the British Force W of the Ridge, the pale dome of St James' Church marking the site of the Kashmir Gate, and the square roof of a factory that of the Mori Bastion. The large house to the W from the Flagstaff Tower is the Circuit House, built at the time of the Coronation Darbar in 1903 for the Viceroy, and used until 1931 as Viceregal Lodge

A pleasant walk may be taken through the old Cantonment, in which "bells of arms" for storing the muskets can still be seen, and which the Najafgarh Canal bounds on the farther side. The area on both sides of the canal

[1] The monument marks the position of the left-hand gun.

(in reality a drainage cut from swamps at Najafgarh) was used for the main Civil Camps in 1903, and at the Coronation Darbar of 1911 Near the drainage cut is the **Rajpur Cemetery**, where Major-General Sir H Barnard and brave men who fell before Delhi lie buried.[1] There is a memorial cross of grey Aberdeen granite Some 2 m to the N side of the road is the Plain of Barwari, on which the Imperial Assemblage of 1st January 1877 and the Coronation Darbars of 1st January 1903 and 12th December 1911 were held, and presented scenes of splendour The earthwork of the amphitheatre erected in 1911 has been maintained, and the site of the thrones occupied by their Imperial Majesties marked by a granite column A railway was made to Kingsway, where there is now a Hospital for Tuberculosis

Four m down the Karnal road is the field of the Battle of Badli-ki-sarai, fought on 8th June 1857 (p 285). A memorial to the 75th Foot is in Sarai Pipal Thala village area A mile to the W. of the old Mughal Sarai, of which only the two main gateways now remain, are the ruins of the Shalamar Gardens of the Emperor Shah Jahan, the scene of the coronation of his usurping son, Aurangzeb

Returning to the **Flagstaff Tower** in which the ladies and children were gathered all the afternoon of 11th May 1857, and proceeding S down the Ridge, an ancient building, probably a tomb, of the time of Firoz Shah, now known as the **Chauburji Mosque**, is reached in half a mile

[1] This walk can be prolonged by 4 m by walking N through the old Cantonment to the end of the Ridge and the tomb of **Shah Alam** situated near Wazirabad, on the bank of a nulla spanned by an old Pathan bridge

This formed the left of the British position on the Ridge, and round it traces of the breastworks may be seen. The dark building that rises ½ m farther S. is the so-called **Observatory**, most probably a portion of Firoz Shah's *Kushak-i-Shikar*, or hunting-lodge, known generally as the Pir Ghaib

Hindu Rao's House, now a Hospital, the key of the position on the Ridge, was held by Major Reid (afterwards Sir Charles Reid, G.C B) with his little Gurkhas,[1] supported by the 60th Rifles and the Guides From the N side of this, on the edge of the reservoir of the Delhi Waterworks, a fine view is obtained of the slope from the Mori Gate up to the right of our position, to which the mutineers so often advanced. At the bottom of the slope, on the W side, is a fine *baoli* (tank), which belonged to the Hunting Palace of Firoz Shah At the bottom of the baoli an old underground passage leads through the Ridge The key of the passage can be obtained at the Hospital

Within the grounds of the Hunting Palace was erected the pillar or **Lat of Asoka**, 250 yds S of Hindu Rao's House. It was broken by an explosion early in the 18th century and lay on the ground for 150 years, the letters of the original inscription are consequently less clear than in the case of the similar pillar in the Kotla of Firoz Shah (see below). It was originally at Meerut

Three hundred yards S. the **Mutiny Memorial** occupies the site of the right batteries of the position, on the panels round the

[1] The 2nd King Edward's own Gurkha Rifles (The Sirmur Battalion) carry a bronze truncheon, surmounted by a crown in silver, supported by three Gurkha soldiers in bronze On a ring of silver below the figures is the inscription: "Main Picquet, Hindu Rao's House, Delhi, 1857 "

base of the memorial are records of the troops who served before Delhi, of the various actions fought by them, of our losses, and the names of the officers who fell in them.

W of the memorial was the Crow's Nest, over a quarry At this end of the Ridge Timur entrenched himself after crossing the Jumna in December 1398, and repulsed an attack made on him by the Minister of Mahmud Tughlaq From it a view is obtained of the Sammy House Battery, 400 yds to the S E, and the smashed face of the Mori Bastion 1000 yds. off, while the buildings of the Police Lines and Ludlow Castle indicate the position of the Siege Batteries The Sammy House, quaintly named from the image of a deity (Swámi) in the court of a monastery, was held in order to check the attacks on the right, and round it severe fighting took place. the Sammy House Battery was erected 100 yds to the N of it

In the dip of the Ridge where the railway runs are the suburbs of Paharganj and Kishanganj, and farther to the W **Sabzi Mandi** (Vegetable Market), through which the enemy often attacked the British position, and even their right rear at the General's Mound W of Sabzi Mandi are the **Roshanara Gardens**, created by the daughter of Shah Jahan, who lies buried here She died in 1671—three years before her sister, Jahanara Begam (p 304) There is a Club here (1922) for Indians and Europeans

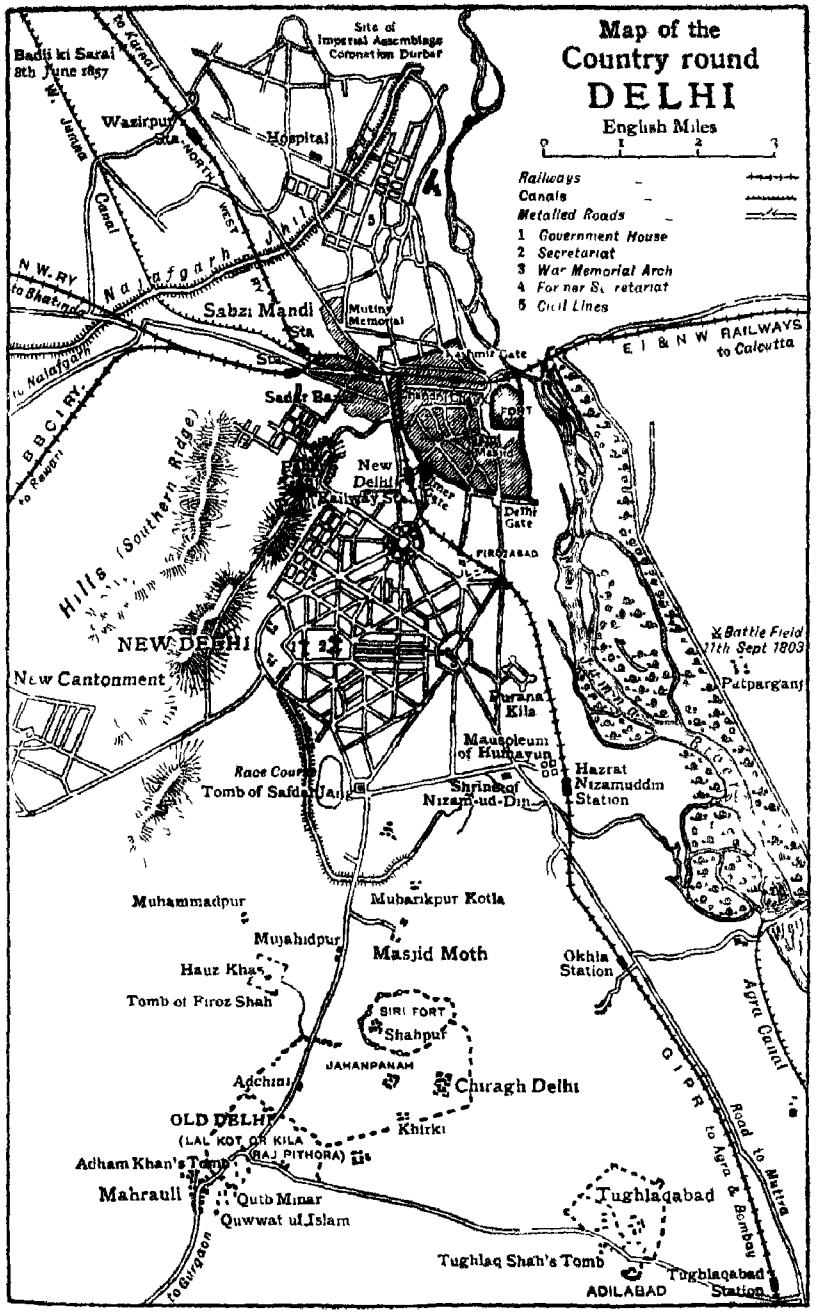
(3) Tract lying immediately to the S. of the City.

A description of the portion of this tract which is covered by the New Capital is given separately from p. 313.

For the present purpose the tour will be made by starting on the E side from the **Delhi Gate** and returning on the W. side to the **Ajmer Gate.** On Sikandra Road, to the right, is the Lady Irwin College

A Pathan gate of decorated stonework, passed on the left, is known as the **Lal Darwaza**, or Red Gate, and was apparently the Northern gate of the short-lived capital of Sher Shah (d 1545), which probably was left incomplete Then a road leads to the left to the **Kotla of Firoz Shah,** (1351-88), which formed the citadel of the city of Firozabad

In the Kotla, on the top of a platform, rises the second **Lat of Asoka**, which was brought from Topra, in the Ambala District, 1052 (or from Muttra), and erected here by Firoz Shah The pillar is 10 ft 10 in round where it leaves the platform, and the total height is 42 ft 7 in , of which 4 ft. 1 in are sunk in the masonry At 10 ft 1 in. from the base are some Nagri inscriptions, with the date in two of them of Samwat 1581=1524 A D These must have been inscribed after the removal of the pillar to Delhi Above these Nagri inscriptions is the inscription, which contains the edicts of Asoka, the Mauryan King (Introd p lxxvii). The characters, which are in Brahmi, the parent of the modern Devanagri and other allied alphabets, are very clearly written, but, when Firoz Shah assembled all the learned of his day to decipher the inscription, they were unable to do so There is a second inscription, which records the victories of the Chauhan Prince Visaladeva, whose power extended from the Himalaya


Map of the
Country round
DELHI
English Miles
0 1 2 3
Railways
Canals
Metalled Roads
1 Government House
2 Secretariat
3 War Memorial Arch
4 Former Secretariat
5 Civil Lines
Site of Imperial Assemblage Coronation Durbar
Badli ki Sarai 8th June 1857
Wazirpur Sta.
Hospital
Jumna Canal
North West Jhil
Najafgarh
N.W.RY to Shetinde
Sabzi Mandi Sta.
Mutiny Memorial
E I & N W RAILWAYS to Calcutta
to Najafgarh
B B C I RY. to Rewari
Sadar Bazar
Kashmir Gate
Fort
Delhi Gate
New Delhi Railway Station
Hills (Southern Ridge)
FIROZABAD
NEW DELHI
New Cantonment
Battle Field 11th Sept 1803
Patparganj
Purana Kila
Mausoleum of Humayun
Race Course
Tomb of Safdar Jang
Shrine of Nizam-ud-Din
Hazrat Nizamuddin Station
Muhammadpur
Mubarikpur Kotla
Mujahidpur
Masjid Moth
Okhla Station
Hauz Khas
Tomb of Firoz Shah
SIRI FORT
Shahpur
JAHANPANAH
Agra Canal
Adchini
Chiragh Delhi
OLD DELHI
(LAL KOT OR KILA RAJ PITHORA)
Khirki
G I P R
Road to Agra & Bombay
Adham Khan's Tomb
Mahrauli
Qutb Minar
Quwwat ul Islam
Tughlaqabad
Road to Mathra
to Gurgaon
Tughlaq Shah's Tomb
ADILABAD
Tughlaqabad Station

to the Vindhya This record consists of two portions—the shorter one immediately above Asoka's edicts, and the longer immediately below them. Both are dated Samwat 1220 = 1163 A.D, and refer to the same Prince. There are minor inscriptions of little interest

To the S. of the Lat is a **Mosque** now much ruined, but which must once have been imposing, it was surrounded by arcades and by a covered hall borne by plain stone columns like those of the Kalan Masjid in Delhi To the S of it again are the spacious enclosures shut in by the very lofty walls which look so imposing from the Agra Road The interior courtyards have been cleared of debris and grassed A circular *baoli*, with two storeys of arches, is particularly worthy of notice The ruins of **Firozabad** were extensively used for the cities of Sher Shah and of Shah Jahan, although scattered ruins show that its area must have been larger than that of the present city

To the S, on the site of the old **Indrapat**, rise the lofty walls of the **Purana Qila**, with their graceful high gates, built by Sher Shah, with additions by Humayun The S. gate, by which the Fort is most conveniently entered, is reached by a bridge across an old branch of the Jumna here, at the junction are the Khair-ul-manazil, a Madrasa and mosque built by Maham Anagah, foster-mother of the Emperor Akbar and mother of Adham Khan (p. 311) To the side of this is another gate similar to the Lal Darwaza, which formed the entrance of a large market. It is worth while to ascend the gate of the Purana Qila for the sake of the panorama Paths lead to all the gates and round the double cloisters inside the walls There is a *baoli* of great depth, with some underground baths near it

A road from the gate leads to the **Mosque of Sher Shah**; the colour of the red sandstone, the brackets under the balconies, the floral carving round the arches, and the pendentives of the domes of the interior are all worthy of special notice A little to the S of the mosque is a red octagonal building, called the Sher Mandal, on the steps of which, on the 24th January 1556, the Emperor Humayun slipped while descending to offer the evening prayer, and received injuries of which he died three days later. The railway used to run W of the Purana Qila, but was diverted E in 1920

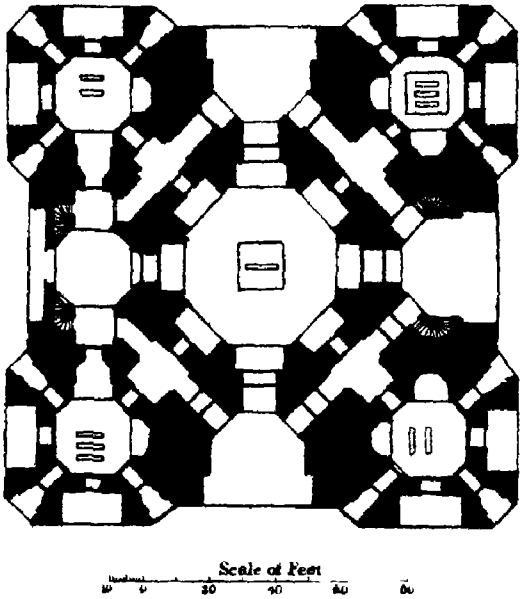
Two miles farther down the Delhi-Muttra Road,[1] at a tomb with a dome of green glaze, branch roads lead to the **Mausoleum of Humayun** on the E and to the shrine of Nizam-ud-din Aulia on the W From the Hazrat Nizam-ud-din station, on the G.I P Rly line from Delhi Central to Agra and Bombay, a road runs past Humayun's Tomb to the Tomb of Saidar Jang (p 305)

The road leads into a forecourt, on the right of which lies the entrance to an octagonal enclosure containing the mosque and tomb of Isa Khan, one of the best remains of the later Pathan period. It then enters the **Bu Halima Garden**, restored (1914) to its former purpose Alighting at the Eastern Gate of the Bu Halima Garden, the visitor passes into a garden forecourt to Humayun's tomb enclosure On the right of the forecourt is the gateway of the **Arab Sarai**, built by the widow of the Emperor Huma-

[1] Left of the road will be seen a kos minar pillar or Mughal milestone The kos of Akbar was a varying measure, averaging 2 m 1000 yds.

yun. Immediately in front is the noble portal of the tomb enclosure The gate takes the form of a deep, octagonally recessed bay, — a treatment repeated in the central bay of the Mausoleum.

The tomb is 156 ft. long each way, and the height to the top of the dome is 125 ft. It stands upon a platform of red sandstone, and consists of a central octagon surstone and marble. In the centre of each side of the main octagon is a porch 40 ft. high, with a pointed arch From the S. porch a door leads to the central octagonal chamber, with a diameter of 48 ft, in which is the cenotaph of the King—it is of white marble, and quite plain, without any inscription. The actual grave chamber can be entered by a



Plan of the Tomb of Humayun

mounted by a dome with octagon towers of unequal sides at the angles "Its plan is that afterwards adopted at the Taj, but used here without the depth and poetry of that celebrated building. It is, however, a noble tomb, and anywhere else must be considered a wonder" (Fergusson). The red sandstone of the exterior is most artistically picked out in relief with white marble. The windows are recessed, and the lower openings are filled in with beautiful lattices of

long, dark passage in the S face of the platform. In the N.E corner above is the tomb of his wife, Haji Begam, who built her husband's tomb Among the tombs in other chambers are believed to be those of Dara Shikoh, executed near by, two brothers of Bahadur Shah, and Alamgir II. Steps lead from the side of the E and W bays, first up to a gallery round the upper portion of the central chamber, and then to the terrace round the neck of the great dome

The buildings on the terrace, which once formed a small college, afford a splendid view of the country on all sides Inside the garden of the mausoleum, which measures 13 acres, is a pretty tomb of red sandstone, with some beautiful grilles; outside, at the S.E. corner, rises the blue dome of the tomb of Fahim Khan, while half a mile away to the S W. is the huge half-ruined tomb of **Khan-i-Khanan**. Outside the N E corner of the garden is an interesting enclosure and mosque, said to have been the abode of Nizam-ud-din Aulia. At the tomb of Humayun Major Hodson received the surrender of Bahadur Shah, ex-King of Delhi, after the capture of the city. A few paces to the right are the tomb and mosque of **Isa Khan**, a visit should also be paid to the tomb of Khan-i-Khanan (despoiled by a Nawab of Oudh), and the old Barapala Bridge beyond it, over an old arm of the Jumna

The tour may be broken here for lunch in New Delhi

The **Dargah, or Shrine of Nizam-ud-din Aulia, stands on the** left side of the branch road to the W.[1] On the N side are the Lal Mahal, or Red Palace, possibly of Ala-ud-din Khalji, and the Barah Khamba, or Twelve Columns, and on the S E. side, in the village, a ruined mosque, with four arcaded courtyards, similar to that at Khirki (p. 312), and of the date of 1373 A D

The gateway leads to the tank, a special feature at Chishti Dargahs, and in this instance the traditional cause of the quarrel between the King Tughlaq Shah and the Saint, who lived to the age of ninety-two, and died in 1324 A.D. The story runs that the King requisitioned the workmen on the tank for labour on his fortress at Tughlaqabad, and that when the Saint arranged to carry on his work at night the King forbade the sale of oil to him Thereupon the water of the tank miraculously served as oil, and was duly cursed by the incensed King, in return for which the Saint cursed Tughlaqabad Nizam-ud-din was concerned in the plot against the King, which resulted in his death (1325), and the saying with which he comforted his disciples when told that the King was returning to punish him, and, indeed, was only a few miles distant—" Dilli hanoz dur ast " (" Delhi is still far off")—is a proverb still in currency

On the right of the tank are some tombs, and from these and from the enclosure walls men and boys dive into the water On the left side a covered passage leads to an inner gate, and another beyond, which gives admittance to the court in which the **Tomb of the Saint** stands This is built of white marble, and is 18 ft sq and surrounded by a broad veranda, there is very little of the original structure left Round the covered grave is a low marble rail, and over it is a canopy inlaid with mother-of-pearl, in the walls are fine pierced screens

W of the tomb is a red sandstone mosque called the **Jamaat Khana**, with a large central compartment and two side bays, somewhat in the style of the Alai Darwaza; and at the N. end of the enclosure is a R H. *(not available)* built by the Emperor Aurangzeb The Jamaat Khana is a magnificent relic of the Khalji period, but it is obscured by surrounding tombs.

S of the tomb of the Saint are, from W to E, the grave enclosure of Jahanara **Begam**,

[1] See the comprehensive account in "A Guide to Nizam-ud din," by Maulavi Zafar Hasan (No 10 of *Memoirs, Arch. Survey of India*, Calcutta, 1922).

sister of Aurangzeb, of **Muhammad Shah**, King 1719-48; and of **Prince Jahangir**, son of Akbar Shah The grave of the Begam is open to the sky, and has grass planted in the hollow in the top of it; the inscribed headstone expresses the sentiment of this humble arrangement The other two tombs have elaborately-carved marble doors in screens of beautiful pierced marble

Beyond the central court is another called the **Chabutra-i-Yaran**, or Seat of the Friends, where the Saint used to sit with his disciples To the right in this enclosure is the tomb of the famous poet, **Amir Khusru**, the friend and disciple of the Saint, whom he survived about six months In the inscription on the walls he is termed the Tuti-i-shakar maqál, or sweet-tongued parrot The grave chamber is surrounded by two pierced stone screens, and only a very subdued light reaches it

E of the tank, on a higher level, is the polychrome tomb of **Azam Khan**—known also as **Atgah Khan**—who saved Humayun at Kanauj (1540), and was a foster-father of the Emperor Akbar. He defeated Bairam Khan when that General rebelled ,and was murdered at Agra on 16th May 1562 by Adham Khan (p 311).

S E is the Hall known as the **Chausath Khamba**, or Sixty-four Pillars, which forms the family vault of the sons and brothers of Azam Khan, who were known as the Atgah Khail, (or Gang), from the royal favours which were showered on them. It was built by **Aziz Kokaltash**, foster-brother of Akbar, and who died in 1625 A.D

About 2 m. W. from the Dargah will be seen a domed mausoleum on the left (a mile away) and four on the right The first is that of **Mubarak Shah**, murdered in 1433. Of those on the N side, the octagonal building covers the grave of another Saiyad King, **Muhammad Shah** (1450), prototype of Humayun's tomb; the next is the gateway to a mosque beautifully decorated with plaster, and the most splendid specimen of this work in all India, the third is perhaps the tomb of Ibrahim Lodi (1526), and the fourth, N. of the village and close to a stone bridge, is the mausoleum of **Sikandar Lodi** (1489-1517), in the middle of a fortified enclosure The golf course and Lady Willingdon Park adjoin

At the end of the road is the mausoleum ("the last flicker of the lamp of Mughal architecture") of **Nawab Safdar Jang** (died 1753), the title of Mirza Muqim Abul Mansur, Subadar of Oudh and Vizir The enclosure is entered by a gateway, to the N of which is a mosque opening to the outside of the garden The tomb stands on a platform at the end of a paved walk, once with a water channel It is 90 ft. square, of three storeys, with fawn-coloured stonework In the central chamber is the carved cenotaph, and in the chamber below are two earthen graves The view from the top of the roof is extensive ½ m S is the Tomb of Mirza Najaf Khan (d 1782)

The road to the N of the tomb, which connects it with the **Ajmer Gate**, runs directly through the centre of the New Capital (p 313) 3 m. to the N., on the E of Parliament St in New Delhi, is a ruined Observatory, Jantar

Mantar, erected, like those at Ujjain, Jaipur, and Benares, by Maharaja Jai Singh II. of Jaipur about 1725 A.D. The largest of the buildings is an immense equatorial dial, named by the Raja "Prince of Dials," the dimensions of the gnomon being as follows.—

	ft	in
Length of hypotenuse	118	5
,, base	104	0
,, perpendicular	56	7

To the S. of the gnomon are two circular structures, with niches in the walls to enable the ascension and declension of the stars to be marked on them. 2 m. N. of the Observatory, after crossing a bridge over the railway, is the Ajmer Gate of the city, with a park close by.

(4) The Extreme S. of the Surroundings of Delhi, including the Qutb (11 m. from Delhi) and Tughlaqabad (5 m. from the Qutb)

Immediately S. of the tomb of Safdar Jang is the field of battle upon which Timur utterly defeated Mahmud Shah Tughlaq and his Minister on 12th December 1398, and became master of Old Delhi. A mile farther S., on the left side of the road, is seen the dark wall of an Idgah, where Timur encamped the day after the battle. E. of this rise the walls of **Siri**, and to the S. of them a lofty platform known as the Badi Manzil, and the **Begampur Mosque** with many domes. This mosque has an extremely fine court, and was built by the Wazir Jahan Khan in the reign of Firoz Shah. Sockets of the Qasr-i-Hazar Satun (1000-pillared Hall) were found in 1933.

W. of the road, a large dome rising above trees indicates the **Mausoleum of Firoz Shah Tughlaq**, who died in 1389. It is built on the S.W. corner of **Hauz Khas**, constructed by 'Ala-ud-din Khalji, and is well deserving of a visit. A path has been made to this group of buildings. Here Timur first rested after his victory.

At the 9th milestone the road passes through the **Jahanpanah** defences, which were constructed to connect Siri, the new city of 'Ala-ud-din, with the older Delhi to the S. of it. The wall of this, originally the **Fort of Rai Pithora**, is crossed at the 10th m., whence the Northern wall of the citadel of **Lal Kot** can be seen. The remains of the walls of the citadel of Rai Pithora are marked out by beacons. In the middle of the E. side of the Lal Kot is the Qutb enclosure, and on the S. wall is the tomb of Adham Khan (p. 311). Rai Pithora is the local name of Prithvi Raj, the gallant Chauhan Prince of Ajmer, grandson of both Anang Pal II. Tomar and his conqueror Bisal Deo, Chauhan, who checked Shahab-ud-din Ghori near Thanesar in 1191, but was defeated and put to death the next year, the fortress falling in 1193.

The arrangement of the **Qutb Minar Enclosure** is shown on the plan given on p. 308. The original **Quwwat ul Islam Mosque** was begun by Qutb-ud-din Aibak when Viceroy of Shahab-ud-din Ghori, after the capture of Delhi in 1193 A.D., as recorded by him in a Persian inscription over the inner archway of the E. entrance. It was seen by Ibn Batuta about 150 years after its erection, when he describes it as having no equal, either in beauty or extent, and was extolled by the poet Amir Khusru, who specially mentions the extension of 'Ala-ud-din. As originally designed, it was not large; but it is unrivalled for the

graceful beauty of the flowered tracery which covers its walls. It occupies the site of Rai Pithora's Hindu Temple, now 5 ft below ground level. Altamsh in 1210-1230 surrounded it by a larger cloistered court, in the S.E corner of which stands the Qutb Minar, and added three arches N and S across the extensions; and in 1300 'Ala-ud-din appended a further eastern court, entered by his great S gateway, the Alai Darwaza, and designed a great addition, with a further extension of the screen on the N. side Within this extended area he commenced to build the Alai Minar, which was to correspond with the Qutb Minar, but to be twice its size, the project died with him Ruined piers of his screen still remain

The entrance to the mosque is a gateway in the centre of its E wall Steps ascending under this lead to the courtyard (942 ft. by 108 ft), which is surrounded by cloisters formed of Hindu and Jain pillars placed one upon another. Most of these are richly ornamented, many of the figures have been defaced, but some may still be found in odd corners Some are superimposed White pillars on the plan are missing

The inscription over the E gate states that the materials were obtained from the demolition of twenty-seven idolatrous temples, each of which had cost twenty lakhs of diliwals, fifty diliwals being equal to one rupee The domed pavilions in the angles of the colonnades may have come from Jain temple porches.

The famous Iron Pillar stands in front of the central opening to the mosque proper. The screen was erected by Qutb-ud-din. The central arch is 53 ft. high by 22 ft. wide. "The Muhammadan conquerors had a tolerably distinct idea that pointed arches were the true form of architectural openings, but, being without science sufficient to construct them, they left the Hindu architects and builders to follow their own devices as to the mode of carrying out the form. Accordingly, they proceeded to make the pointed openings on the same principle upon which they built their domes—they carried them up in horizontal courses as far as they could, and then closed them by long slabs meeting at the top" The ornamentation, interspersed with texts from the Koran is evidently adapted directly from that on the old pillars of the cloister Fragments of the roof of the mosque still remain, supported by old columns, and do not reach more than one-third of the height of the screen in front of it. When Delhi was captured by Timur the Mughals massacred all the persons who had taken refuge in the mosque.

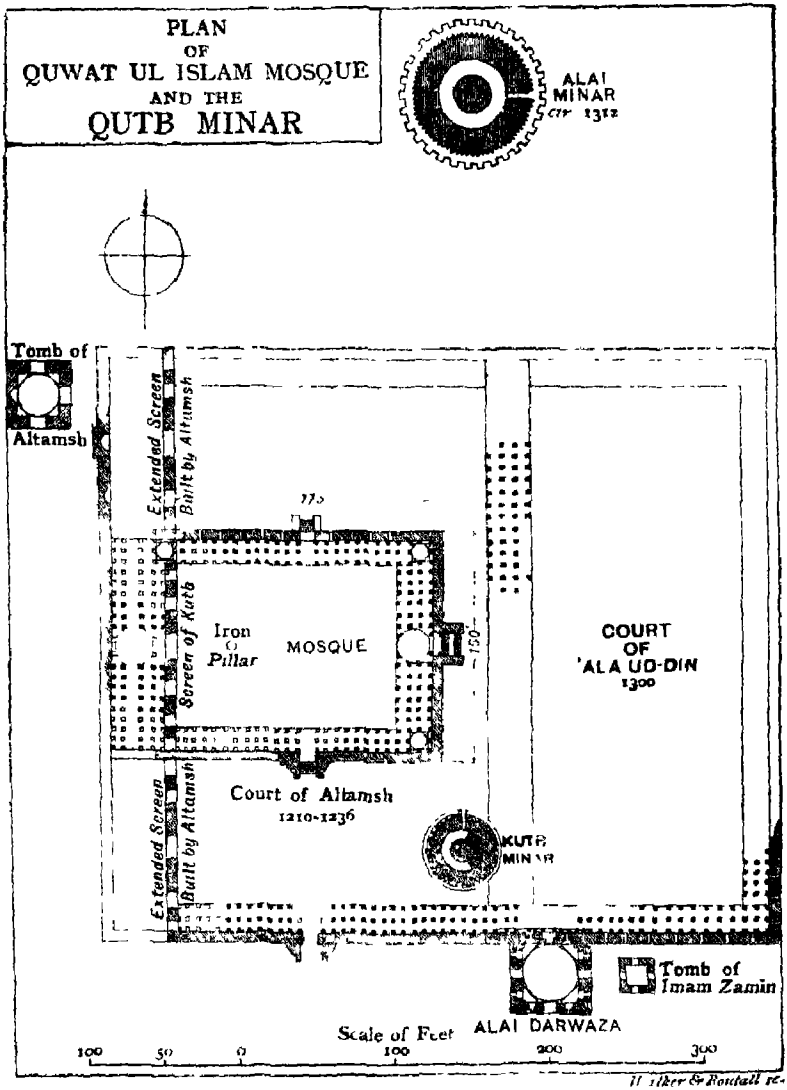
Restoration in 1912-13 indicated the various additions made to the original mosque

The **Iron Pillar** is one of the most curious antiquities in India It is a solid shaft of wrought iron, more than 16 in in diameter and 23 ft. 8 in. in length. The height of the pillar above ground is 22 ft., but the smooth shaft is only 15 ft., the capital being 3½ ft and the rough part below also 3½ ft

"The Iron Pillar records its own history in a well-executed Gupta inscription of six lines of Sanskrit poetry. It was first studied by James Prinsep (*A.S.B. Journal*, 7, 630), and has been finally edited by Dr J. F. Fleet (*Gupta Inscriptions, Corpus Inscriptionum Indicarum*, vol 3) It contains the posthumous eulogy of a king of the name of Chandra, who is said to have conquered the

Vanga Country (*i.e.*, Bengal), and, after having crossed the seven tributaries of the River Indus, to

' the footprint of Vishnu.' " From this it has been surmised that the Iron Pillar bore originally the



have vanquished the Váhlikas in his memory the ' standard of the Lord Vishnu ' was set up on the mountain called Vishnupada,

effigy of the sun-bird Garuda, and stood in front of a Vishnu temple. It is also evident that the pillar does not now stand in its original

position, as the locality cannot possibly be defined as "a mountain." As the Gupta characters of the inscription belong to the Eastern variety, it is most likely that the pillar was brought to Delhi from Bihár, the ancient country of Magadha, which formed the nucleus of the Gupta empire According to one theory, the King Chandra mentioned in the inscription is probably the Gupta Emperor Chandra-gupta Vikramaditya (who reigned 375-413 A D). But Dr Vincent Smith held with Pandit Haraprasad Sastri that the Chandra of the Iron Pillar is Chandravarman, King of Pushkaramna (Pakharan in the Udaipur State), a contemporary of Samudra Gupta (326-375 A D) The name of Anang Pál also is inscribed on the shaft with the date Samvat 1109 – 1052 A D. According to tradition, Anang Pál, the founder of the Tomar dynasty, erected the pillar It rested on the head of a great snake until the Raja unwisely moved it to see if this were so— an act which cost the Tomars their kingdom This tradition perhaps is based on the removal of the pillar to Delhi by Anang Pál Four feet above the inscription is an indentation, said to have been made by a cannon-ball fired by the troops of the Bharatpur Raja. Tablets with the Sanskrit text of the inscription, together with translations in English, Hindi, and Urdu, will be found in the northern cloister of the mosque, they were erected by Pandit Banke Rai of Delhi

Sir Robert Hadfield, F.R S , to whom chippings of the Iron Pillar were sent for analysis by the Director-General of Archæology, reported as follows :—

"It will be noticed that the material is an excellent type of wrought iron, the sulphur being particularly low (0 006 per cent.), indicating that the fuel used in its manufacture and treatment must have been very pure (probably charcoal) The phosphorus is 0 114 per cent There is no manganese present — a somewhat special point, as wrought iron usually contains manganese. The iron was ascertained by actual analysis, and not 'by difference'"

The **Qutb Minar** looks what it is intended to be—a tower of victory It has been suggested that it was originally Hindu, altered and completed by the conquerors, but the conclusion of General Cunningham—that it is a purely Muslim structure – seems correct [1] The lowest storey bears the name of Muhammad bin Sam (Shahabuddin), and of Kutb-ud-din Aibak, and the next three storeys contain that of Altamsh At the entrance door is an inscription of Sikandar Lodi, with the date 1503. As seen at present, it is 238 ft high, and rises in five storeys, with 27 flutings, broken by corbelled balconies and decorated with bands of inscription. The base diameter is 47 ft 3 in and that of the top about 9 ft The three first storeys are of red sandstone with semi-circular and angular flutings, the two upper storeys are faced chiefly with white marble, and were almost entirely rebuilt by Firoz Shah Tughlaq in 1368, when he also added a cupola On 1st August 1803 the pillar was injured by an earthquake and the cupola thrown down It was restored in 1829, the battlements of the balconies being removed and replaced by the present balustrades Notice should be taken of the honeycomb work

[1] For particulars regarding the discussion see *Archæol. Rep* , I, 190. See also *History of the Kutb Minar*, by R. N. Munshi (Bombay, 1911), and *Historical Memoir on the Kutb*, by J. A Page (Mem Arch Survey of India, No 22 Calcutta, 1926).

beneath the brackets of the first-storey balconies, of which the "structure differs in no perceptible degree from that in the Alhambra." The lowest great band of text inscription is well seen from the top of the cloister of the mosque, or of the Alai Gate. A magnificent view is obtained from the summit, reached by 379 steps; but that from the first gallery, 95 ft. above the ground, is nearly as good. At the summit is an aircraft beacon

The **Tomb of Altamsh** (who died in 1235 A.D.) stands outside the N.W. corner of his extension of the mosque. It is of red sandstone The main entrance is to the E but there are also openings to the N. and S The lower part of the interior is covered with beautiful Saracenic surface decoration, and is inscribed with finely-written passages of the Koran, in the centre of the W side is a Kibla of white marble discoloured with age. The tomb is in the centre, and stands on a high base; that the actual tomb is a cenotaph was proved by the discovery of a chamber beneath it (approached by a narrow flight of stairs) which apparently contains the real grave General Cunningham notes that "there is good reason to believe that it was originally covered by an overlapping Hindu dome A single stone of one of the overlapping circles, with Arabic letters on it, still remains" It is the oldest tomb known to exist in India

The Alai Darwaza, 40 ft. to the S.E. from the Qutb Minar, is the S. entrance of the great or outer enclosure to the mosque It was built of red sandstone richly ornamented with patterns in low relief, in 1310 A.D., by 'Ala-ud-din Over three of the entrances are Arabic inscriptions, which give 'Ala-ud-din's name and his well-known title of Sikandar Sani, the Second Alexander, with the date 710 A.H. The building is a square with lofty doorways, with pointed horse-shoe arches on three sides and a rounded arch curiously decorated on the inner side. In each corner there are two windows, closed by massive screens of marble lattice-work. A considerable area of ground lying between the Qutb enclosure and the walls of the "Metcalfe Estate" enables the visitor to see the Alai Darwaza from the S A few yards to the E stands the richly-carved building in which is the tomb of **Imam Zamin.** He came to Delhi in the reign of Sikandar Lodi, and died in 944 A.H. = 1537 A.D. The tomb is a small domed building, about 18 ft square, of red sandstone, covered with chunam. There is an inscription in the Tughra character over the door

The **Alai Minar** stands 150 ft N of the original Qutb enclosure. The inner tower and outer wall are of very coarse work, of large rough stones, the flutings in the exterior show the shape which the Minar would have assumed when lined with red sandstone The total height as it now stands is 70 ft above the plinth, or 87 ft above the ground level Had this pillar been finished it would have been about 500 ft high In the S W corner of the *outer* enclosure, corresponding with the tomb of Altamsh, is a group of ruined buildings. The ruin on the S. side is believed to have been the tomb of 'Ala-ud-din and the grave in the centre room, brought to light in the course of excavation (1914), is said to be his: the buildings on the right are known as 'Ala-ud-din's College Considerable conservation work was carried out in 1915 in connection with the Qutb group of buildings The old road running through the group has been diverted, lawns planted, and carefully designed shrubberies indicate the colonnades

To the S.E. of the Qutb Minar is a tomb of a brother of Adham Khan, once used as a country house by Sir T. Metcalfe, and 500 yds beyond it is a mosque of the latest Pathan style, known as the **Jamali Mosque** At the N.E. corner of it, in a separate enclosure, is the tomb of Shaikh Fazl-ullah, decorated with bright tiles 200 yds. due E of the mosque are the broken massive walls of the **Tomb of Balban** (1287 A D), which formed a Dar-ul-Aman, or House of Refuge, in his lifetime

To the W of the Qutb enclosure, which is bounded by the road from Delhi to Mahrauli, a paved way leads to a well-known Hindu temple called the Jog Maya 200 yds farther S the tomb of **Adham Khan** rises high on the S wall of Lal Kot Adham Khan, who was half-brother as well as foster-brother of Akbar, murdered Azam Khan, whose wife was also foster-mother to the Emperor, in the palace of Agra, and was thrown down from the terrace there by order of Akbar, who himself felled him with a blow of the fist. Adham Khan had previously driven Rupmati to suicide upon capturing Mandu (p 147), while his mother put to death two of the Shahzadis for fear that they might complain to the Emperor She is said to have died of a broken heart a few days after her son, and to have been buried here too The style resembles that of the Middle Pathan period, it was probably rebuilt from the material of an earlier tomb

A short distance to the S E of the tomb, across the road, is a large round well, into which men and boys dive. Not far from this is the northern entrance of the **Dargah**, or shrine, of **Qutb-ud-din Bakhtiar Kaki**; the inner gateway and the ruined music-gallery gate on the right of the approach date from the time of Salim Shah Close to a third gateway is the grave enclosure of the Nawabs of Jhajjar, the last of whom was hanged in 1857 In the small courtyard are a mosque and the tomb of Maulana Fakr-ud-din, on the right, and standing back from them, is a gate to another court and the main W. approach to the shrine S of this western court is an enclosure with a **Moti Masjid** of white marble, built by Bahadur Shah, eldest son of Aurangzeb, in 1709, and beyond it, in a separate court, are the simple graves of the Kings of Delhi Akbar Shah II (died 1837), of the blind **Shah Alam** (died 1806), and of the **Emperor Bahadur Shah I** (died 1712). The space between the last two was reserved for the last King of Delhi, but he died at Rangoon in 1862 From the Eastern courtyard a passage, paved and lined with marble, and with a pierced marble screen on the right hand, leads past the **Grave of the Saint**, which stands in the open, protected by an awning above it, on the back wall of this enclosure, which may be entered only with uncovered feet, is some fine work of glazed tiles dating from the time of Aurangzeb. The Saint, who was born at Ush, in Turkestan, and perhaps came to Delhi before the Muslim conquest, died during the reign of Altamsh in 1235 A D , his name, Kaki, is derived from the alleged miracle of his having been fed by heavenly food—*kâk*=cake. Outside the innermost shrine is the mosque where the Saint used to pray, and beyond it is a picturesque baoli (tank) At the W. end of this is the grave of **Zabita Khan**, and another, said to be that of Ghulam Qadir Khan, his son, who thus, if the grave be really his, rests near his blinded victim,

Shah Alam. To the S of these is a small court with the graves of the family of the Nawab of Loharu.

Outside the W gate is a gateway known as the Mahal Sarai, and beyond it a mosque standing on a high platform built by Ahsanullah Khan, physician of the last King of Delhi. Turning S along the main street of Mahrauli, the **Shamsi Hauz**, the great tank of Shams-ud-din Altamsh, will be reached on the right It has a ruined pavilion in the centre like the Hauz Khas of 'Ala-ud-din On the E bank is a building of red sandstone called the Jahâz, or Ship, Mahal and the **Aulia Masjid**, where, according to tradition, thanks were offered up on the capture of Delhi in 1193 On the opposite side of the road here is the picturesque Jhirna (Spring) garden, through which the overflow of the tank found its way past the tomb of Balban to Tughlaqabad. 3 m W is the underground tomb of a son of Altamsh

The Fort of **Tughlaqabad** lies 5 m to the E of the Qutb The road passes through the E. wall of Kila Rai Pithora, a mile farther on The N E. portion of this wall runs 1½ m N E to **Khirki**, where there is a most interesting covered mosque with four open courts, each 32 ft sq , built by Jahan Khan in 1380 , it must be visited on foot, but is well worth a visit Adjoining the mosque on the E is a fine sluice of seven bays, apparently of the same date as the mosque, and ¾ m N E again is the Dargah of Chiragh Delhi, the last great Delhi Saint, who died in 1356, and the Tomb of Bahlol Lodi (died 1488)

Long before it is reached the **Fort of Tughlaq Shah** is seen rising high above the plain to the left of the road General Cunningham writes that "it may be described with tolerable accuracy as a half-hexagon in shape, with three faces of rather more than ½ m. in length, and a base of 1½ m., the whole circuit being only 1 furlong less than 4 m It stands on a rocky height, and is built of massive blocks of stone, so large and heavy that they must have been quarried on the spot. The largest measured was 14 ft in length by 2 ft 2 in , and 1 ft thick, and weighed rather more than 6 tons The short faces to the W , N , and E. are protected by a deep ditch, and the long face to the S by a large sheet of water, dry, except in the rainy season, which is held up by an embankment at the S.E corner On this side the rock is scarped, and above it the main walls rise to a mean height of 40 ft , with a parapet of 7 ft , *behind which rises another* wall of 15 ft , the whole height above the low ground being upwards of 90 ft." It had thirteen gates, and there are three inner gates to the citadel

Opposite the causeway to the tomb an arched gateway leads into the fort at the point where the largest of the tanks in it was excavated Beyond this, to the N W and N , are ruins of the palace and a mosque, and high above it, in the S.W angle, is the citadel, which occupies about one-sixth of the area It contains the ruins of an extensive palace, surmounted by an inner citadel, from which there is a splendid view. The ramparts are raised on a line of domed rooms, which rarely communicate with each other, and which formed the quarters of the garrison One dark passage near the S.E corner, below the inner citadel, leads to a small sally-port in the outer wall. The walls slope inwards, and the vast size, strength, and visible solidity of the whole give to Tughlaqabad an air of stern and massive grandeur.

In the N. part of the fort below are the ruined walls of a Jami Masjid. The curse of the saint, Nizam-ud-din Aulia, upon Tughlaqabad was—

"Ya base Gujar
Ya rahe ujar"

("May it be inhabited by Gujar or may it remain desolate"),

and it contains small Gujar colonies in the midst of its desolation

The fine *Tomb of Tughlaq Shah* is outside the S wall of Tughlaqabad, in the midst of an artificial lake, and surrounded by a pentagonal outwork, which is connected with the fort by a causeway 600 ft long, supported on twenty-seven arches. Fergusson says (*Ind Arch.*, 2, 215) "The sloping walls and almost Egyptian solidity of this mausoleum, combined with the bold and massive tower of the fortifications that surround it, form a model of a warrior's tomb hardly to be rivalled anywhere" The outer walls have a slope of 2 333 in per foot; at base they are 11½ ft thick, and at top 4 ft The exterior decoration of the tomb itself depends chiefly on contrast of colour, which is effected by the use of bands and borders of white marble inserted in the red sandstone In plan it is a square, and three of its four sides have lofty archways, the space above the doorway being filled with a white marble lattice screen of bold pattern. It is surmounted by a white marble dome In the S.W. corner of the enclosure is a small domed chamber with a number of graves

"Inside the mausoleum there are three cenotaphs, which are said to be those of Tughlaq Shah, his Queen, and their son Juna Khan, who took the name of Muhammad when he ascended the throne." This King was, and is still, known as the Khuni Sultan, "the bloody King." Firoz Shah, his successor, bought acquittances from all those he had wronged, and put them in a chest at the head of his tomb, that he might present them when called to judgment.

Opposite the S W corner of Tughlaqabad the embankment of the lake connects **Adilabad**; there is a sluice between it and the rocky ground at the N. end Adilabad is said to have been built by Muhammad Tughlaq; there is a fine gate in the W face. From the top there is a magnificent view of the fort and the Qutb Minar A little farther to the E is an isolated outwork called the Nai's (Barber's) Fort, which seems to have been a fortification of Tughlaqabad 2½ m farther on, and 8 m. from the Qutb, is **Badarpur** with an interesting Mughal Serai, on the road and railway from Delhi to Muttra. From Badarpur it is 7 m. to the mausoleum of Humayun and shrine of Nizam-ud-din. The boundary of the Delhi Territory is 1 m S

(5) New Delhi.

The New Capital of Delhi is a conspicuous example of town planning At the time of the Delhi Darbar in December 1911, His Majesty the King-Emperor, George V., said:—"It is my desire that the planning and designing of the public buildings to be erected be considered with the greatest deliberation and care so that the new creation may be in every way worthy of this ancient and beautiful city."

The Raisina Site, which is on the eastern slope of the hills to the south of Delhi, was the selection of a Town-planning Committee, consisting of Captain Swinton, Mr J. A Brodie and Sir Edwin Lutyens, endorsed in 1913 by a Committee consisting of the late Surgeon-General Lukis, Sir Hugh Keeling and the late Col Robertson, I.M S.

Work was immediately begun, but progress was suspended during the First World War, and the new city was formally inaugurated 15th February 1931. The design included provision for 84 miles of communications, a piped water-supply and electricity-supply

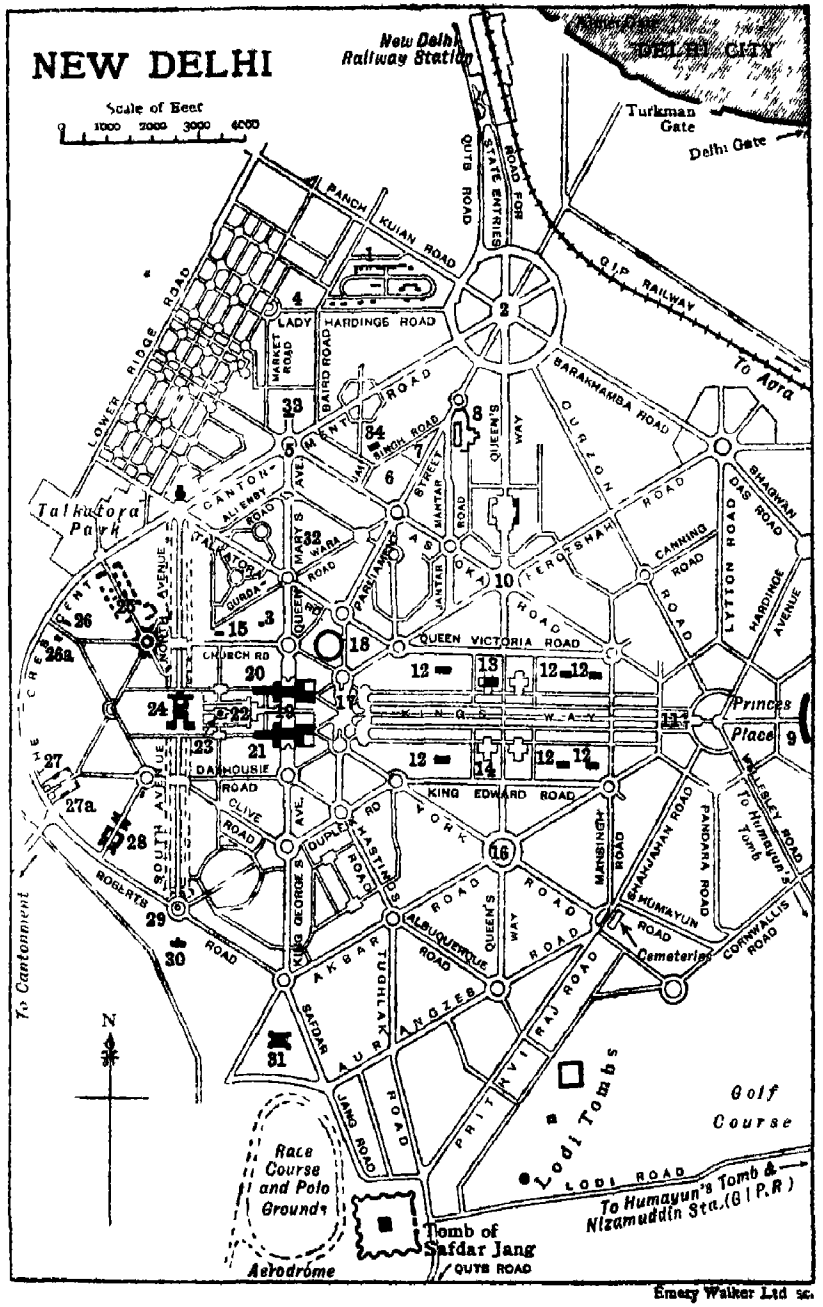
The general plan is pivoted on a line of origin which ties the new city with a great architectural feature of the old city This is the straight line from the Raisina Hill, on which the Government Secretariat has been built, to the Jami Masjid (p. 294) in Old Delhi At an angle of 60° from this alignment lies the main axis of the new city, which is oriented exactly E and W , containing the Viceroy's House, the Secretariat, Kingsway and the All-India War Memorial This axis centres at the east end on the N W gate of the Purana Qila, or the old fort (Indrapat, p 302) Kingsway is crossed at right angles by a N and S line, on which lies Queensway Visitors should proceed from the New Delhi Railway Station near the Ajmer Gate (p 305) and along Queensway to the point in Kingsway where it is crossed by Queensway

The main avenue, or Kingsway, has a parkway width of 1175 ft. and is flanked by ornamental tanks At the east end are the Princes Place and the War Memorial On both sides of the central avenue are the houses of members of the Executive Council of the Government of India On the N side is the Record Office which provides accommodation for part of an ethnological museum The remainder is in a building on the S of Kingsway, which contains Sir Aurel Stein's Central Asian antiquities, with remarkable frescoes Farther west is Prince Edward Place, a spacious piazza, combining Buddhist, Muslim, and Hindu features [1] The forecourt, which is provided with six fountains, covers an area of 26½ acres, and roads radiate from it in all directions Through the centre runs the Processional

[1] Compare the railing at the Sanchi Tope (p 162)

REFERENCES TO SKETCH PLAN

	No in Plan
Government Buildings	
Legislative Buildings (Parliamentary Rotunda)	18
Imperial Record Office	13
Secretariat, North Block	20
Secretariat, South Block	21
Residences	
The Viceroy's House	24
Commander-in Chief	30
Controller to Viceroy	27a
Members of Council	12
Military Secretary to Viceroy	26a
Private Secretary to Viceroy	26
Staff Quarters Viceroy	25
Surgeon to Viceroy	27
Churches	
Anglican Church of the Redemption	15
R C Cathedral	33
Wesleyan Church	32
Hospitals	
Lady Hardinge College and Hospital for Women	1
Museum	
Ethnological Museum	14
Memorials	
All India War Memorial	11
Imperial Service Cavalry Brigade War Memorial	29
Jaipur Commemorative Column	28
Open Spaces.	
Alexandra Place (Post Office)	5
York Place	16
Government Court (Raisina Hill)	19
Prince Edward Place	17
Connaught Place (Shopping Centre)	2
Viceroy's Court	22
Windsor Place	10
Irwin Amphitheatre	9
Imperial Bank of India	7
Club	31
Jantar Mantar (Old Observatory)	8
Market Centre	4
Sikh Shrine	3
Police Lines	6
Bodyguard Lines	28
Y.M C.A	34


NEW DELHI
Scale of Feet
1000 2000 3000 4000
New Delhi Railway Station
DELHI CITY
Turkman Gate
Delhi Gate
QUTB ROAD
STATE ENTRIES
ROAD FOR
PANCH KUIAN ROAD
GIP RAILWAY
To Agra
LOWER RIDGE ROAD
LADY HARDINGE ROAD
MARKET ROAD
BAIRD ROAD
MINTO ROAD
BARAKHAMBA ROAD
CURZON ROAD
QUEEN'S WAY
BINCH ROAD
CANTON-MENT
ALIENBY ROAD
Talkatora Park
TALKATORA ROAD
MARY'S AVE.
WARA ROAD
QUEEN RD
PARLIAMENT ST
JANTAR MANTAR ROAD
ASOK ROAD
FEROZSHAH ROAD
CANNING ROAD
LYTTON ROAD
DAS ROAD
BHAGWAN
HARDINGE AVENUE
CRESCENT
NORTH AVENUE
CHURCH RD
QUEEN VICTORIA ROAD
KING'S WAY
Princes Place
DALHOUSIE ROAD
CLIVE ROAD
SOUTH AVENUE
KING EDWARD ROAD
YORK ROAD
DUPLEX
KASTURBA ROAD
KING GEORGE'S AVE.
MANSINGH ROAD
BHAGWAN DAS ROAD
PANDARA ROAD
To Humayun's Tomb
ROBERTS ROAD
ALBUQUERQUE ROAD
HUMAYUN ROAD
Cemeteries
CORNWALLIS ROAD
To Cantonment
AKBAR ROAD
TUGHLAK ROAD
ANGLESEY ROAD
SAFDAR JANG ROAD
PRITHVI RAJ ROAD
Lodi Tombs
Golf Course
Race Course and Polo Ground
Aerodrome
Tomb of Safdar Jang
QUTB ROAD
LODI ROAD
To Humayun's Tomb & Nizamuddin Stn.(G.I.P.R.)
N
Emery Walker Ltd sc.

Way, which commences at the All-India War Memorial and terminates at the wide steps, flanked by stone elephants, which lead to the Great Place (1100 ft by 400 ft) on Raisina Hill On either side of the entrance to the Court are the Secretariat offices of the Government of India, with loggias and recessed gateways and crowned with towers, these have been occupied since November 1926. The leading features on the E front of each block are vaulted chambers enshrining the foundation-stones laid by Their Majesties on the 15th December 1911 In Committee Room A are paintings by modern Indian artists

At the main entrances on to the Viceroy's Court, as though quartered on a shield, are the four **Dominion Columns** of red sandstone, presented by Canada, Australia, South Africa and New Zealand Each column is 41 ft in height, and on the summit of each is a gilded bronze model of a ship in full sail heading for the East The coats of arms of the Dominions are carved on the base In the centre of the Court is the Jaipur Commemorative Column, a gift of the late Maharaja of Jaipur In the Great Place are statues of five Viceroys

The **Viceroy's House**, covering the same area as Trafalgar Square, consists of a central block surmounted by a copper dome (177 ft above the roadway) and four wings. Thirty-two broad steps lead to the portico and the main entrance to the **Durbar Hall** The Hall is in the form of a circular marble court, 75 ft. in diameter. Groups of yellow marble pillars support the dome The Viceroy's throne faces the main entrance and commands a view of the royal approach along Kingsway and the massive War Memorial Arch in the distance. On the right of the Hall is the State Library A drawing-room (38 ft square) leads to the **Ball Room**, opposite the main entrance to which is a larger drawing-room (105 ft long and 24 ft wide) Next to this is the State Dining Room, panelled in dark wood and hung with portraits of former Governors-General and Viceroys At one end of this room is a band gallery, at the other end two glass doors give access to the terrace Marble staircases on either side of the Durbar Hall lead to the private apartments on the first floor There are 54 bedrooms and accommodation for more than 20 guests The woods used in the decoration are all Indian At the back of the Palace is an Indian garden, a combination of Hindu and Mughal styles On the radials of this are the quarters for the Viceroy's household staff and for the Private Secretary and Military Secretary in the N, and the quarters for the Viceroy's Surgeon and the Viceroy's Controller and the Bodyguard Lines in the S.

To the north-east of the Raisina Hill on the line of origin already mentioned is the circular Parliamentary building, in which are three semicircular chambers for the Chamber of Princes, the Council of State (the Upper House), and the Legislative Assembly (the Lower House). The foundation-stone was laid by H R H the Duke of Connaught in 1921, and the buildings were opened by His Excellency Lord Irwin on the 18th January 1927 The main features of the design are spacious lobbies and room for expansion when Federation comes. The Central Library is surmounted by a 90 ft. dome. Portraits of the Duke of Windsor, Lords Hard-

inge, Chelmsford and Reading, the three "Delhi Viceroys," of Lord Irwin (Viscount Halifax) and the Marquess of Willingdon, hang on the walls The road to the N E from the Parliamentary buildings, which is aligned on the Jami Masjid, is called Parliament Street, with All India Radio Broadcasting House, and on the east is the old Observatory of Maharaja Jai Singh (p. 306)

The Rikabganj *gurdwara* (Sikh Shrine) at the corner of Church Road and Queen Mary's Avenue contains the *samadh* (tomb) of Tegh Bahadur, the ninth *guru* of the Sikhs, who was put to death in 1675 by order of Aurangzeb at a spot in the Chandni Chauk (p 296) known as the Sisganj *gurdwara*.

On Lower Ridge (Reading) Road a communal (Birla) temple of Lakshmi Narayan, and a Buddhist Vihara adjoining were opened by M K Gandhi (1939)

In Church Road is the Anglican *Church of the Redemption* (consecrated on 15th February 1931, tower completed 1933) The altar was given by the Dean and Chapter of York in commemoration of the thirteenth centenary of York Minster, and the picture at the E end was presented by Lord and Lady Irwin as a thanksgiving for escape from an attempt to blow up his train outside New Delhi in December 1929 The Wesleyan Church is on Parliament Street The Roman Catholic Cathedral is on the N side of Alexandra Place. An Indian Christian Church is on the Lower Ridge (Reading) Road

The northern portion of Queensway starts from the Station for State Entries The road then to the S. passes through Connaught Place, an inner circle with Connaught Circus round it, in which the Regal Theatre and cinemas are situated. From this Circus radiate several roads. Curzon Road gives a vista to the S E. of Princes Place, in which is situated the War Memorial Arch. Parliament Street runs to the Parliamentary buildings to the S W The main road to the Cantonments also takes off here

On Queensway are Telegraph and Telephone Offices, the Hostel for Members of the Legislatures, and the Imperial Hotel adjoining Western Court

Queensway then proceeds to a circular space called Windsor Place The road next crosses Queen Victoria Road and traverses the main avenue, Kingsway, past the Record Office, and crossing King Edward Road leads to York Place, an oval space, where diagonal roads, York Road and Akbar Road, intersect

The residential bungalows provided for the officers of the Government of India are air conditioned (1939) Forty sites for the residences of the Indian Princes and Chiefs have been allotted in the vicinity of Princes Place at the east end of Kingsway The residences of H.E.H the Nizam of Hyderabad, the Gaekwar of Baroda and H H. the Maharaja of Bikaner are to the N. and S of Princes Place, and Travancore House is a short distance away on Curzon Road.

Three radial roads run N. from Princes Place, bearing the names of Viceroys in whose times the Darbars of 1877, 1903 and 1911 were held Shah Jahan Road is aligned on Safdar Jang's Tomb (p 305) in the S W., and Wellesley Road to the S.E. joins the Delhi-Muttra Road, and leads also to the

Lodi golf-course, maintained by the New Delhi Municipal Committee

The Government Offices at the E. end of the Raisina Hill are the meeting-place of Queen Mary's Avenue coming from Alexandra Place on the N and of King George's Avenue coming from Gymkhana Club in the S. The Post Office is in Alexandra Place, and beyond to the N is Market Road leading to the markets

The Viceroy's House is the meeting-place of the North Avenue and the South Avenue North Avenue terminates in Cantonment Road This road, starting to the S W from the shopping centre (Connaught Place and Circus), reaches Alexandra Place, and, skirting Viceregal Estate as the Crescent, proceeds to the Cantonment On the west of the commencement of the Crescent is a public recreation space, Talkatora Park, on the site of an old Mughal garden, with grounds for football, hockey and tennis

The Imperial Agricultural Research Institute, in 400 acres of grounds, lies west of the Upper Ridge Road approached by Linlithgow Avenue

At the junction of South Avenue with Roberts Road is the Imperial Service Cavalry Brigade War Memorial, unveiled by Lord Reading in 1924 Immediately opposite the Memorial is the residence of the Commander-in-Chief, resembling Government House, Barrackpore Farther south, beyond the Club and to the west of Safdar Jang's Tomb, is the Race-course, in which are grounds for polo. South of this is the Willingdon Airport; another for the R.A.F. is in the Cantonment.

The All-India War Memorial in Princes Park is an arch spanning the east end of Kingsway, designed by Sir Edwin Lutyens. The Memorial is 138 ft. high and 90 ft wide. The span of the arch is 30 ft. and the height from the ground to the crown of the arch is 75 ft. Over the arch on both sides is the word INDIA flanked by MCM. Immediately below on the left is XIV and on the right XIX The upper portion is of white Dholpur stone and the lower of red Bharatpur stone On the top of all is placed a great bowl, 11½ ft. in diameter The foundation-stone was laid by H R H the Duke of Connaught in 1921, and the dedication by Lord Irwin took place on 15th February 1931, when the Fire of Remembrance was lighted in the bowl The Arch includes a War Museum and commemorates more than 70,000 Indian soldiers who fell in defence of the Empire between 1914 and 1918, while 13,516 names engraved on the Arch and the fountains to right and left form a separate memorial to those who lost their lives in the N W. Frontier operations of 1914–18 and the Afghan campaign of 1919. Facing the Arch is a Memorial to His Majesty the King-Emperor George V (by C. S. Jagger) East of the Memorial is the Irwin Amphitheatre (1933) where a Horse Show is held annually. A Muslim grave close by is about 700 years old

The Lady Hardinge College and Hospital for Women, with a Child Welfare Centre, is on the west of Connaught Place Lady Irwin College for Women (1938) is in Sikandra Road A statue of Lady Hardinge is in the grounds. The Willingdon Hospital and Nursing Home serves the needs of the New Capital, and the Irwin Hospital (1936), S. of the Delhi Gate, is for the whole of Delhi

The distance from the Railway Station to York Place is about 2½ m., to the Parliamentary buildings about a mile, and to the Cantonments, beyond the Ridge on the W, over 5 miles, while the distance from the War Memorial to the Viceroy's House is about 1½ mile

Sir Hugh Keeling, C S I, A M.I.C.E, was chief engineer 1912-25, then, until 1931, Sir Alex Rouse, C I E, F.C H., then Mr A Brebner. The architect of the Viceroy's House was Sir Edwin Lutyens, R A, who was also primarily responsible for the lay-out of the city, Viceroy's Staff Quarters, Viceroy's Court, Great Place and Kingsway. The Secretariat, Parliamentary Buildings, and residential bungalows were designed by Sir Herbert Baker, A R A The aim of both was "to express, within the limits of the medium and of the powers of its users, the ideal and fact of British rule in India, of which New Delhi must ever be the monument"

ROUTE 15

(*a*) DELHI to **Kasauli** (171 m.) and **SIMLA** (219 m.) by **Panipat, Thanesar, Ambala,** and **Kalka** (162 m.).

(*b*) DELHI to **LAHORE** (310 m.) by **Ghaziabad Junction, Meerut, Sardhana, Saharanpur, Ambala, Sirhind, Ludhiana Jullundur,** and **Amritsar**, and from **Amritsar** to **Dalhousie** and the **Kangra Valley**

(*c*) DELHI to **LAHORE** (297 m.) by **Jakhal, Bhatinda, Ferozepore, Kasur**, and **Raiwind**

There are two routes from *Delhi to Ambala*, both broad-gauge and worked by the N W Ry :—

(1) The Mail route from Calcutta, which proceeds along the W bank of the Jumna, through *Panipat* and *Karnal*, to Ambala, 123 m, and thence to Kalka and Simla. This route was opened in 1891 as the Delhi, Umballa, Kalka Railway.

(2) The Mail route from Bombay, which follows the E bank of the Jumna, crossing it twice, through *Ghaziabad*, *Meerut*, and *Saharanpur* to Ambala, 162 m This is the "Punjab and Delhi" Railway, opened 1869.

From Ambala Route (2) proceeds to Lahore. An alternative route to Lahore, opened 1897, runs by way of Bhatinda

(1) Delhi to Kalka and Simla.

Leaving the central station, the Delhi, Umballa, Kalka railway proceeds over a level plain to

9 m **Badli** Before reaching this station the ruins of the Shalimar gardens (p 300) are seen on the left, and the battlefield of Badli-ki-sarai (pp. 285 and 300) on the right Here the tract

irrigated by the W. Jumna Canal is entered

16 m. Boundary of the Punjab

27 m **Sonepat**, an ancient place, and with Panipat (see below), Baghpat (lying E on the Jumna), Indrapat (p. 302), and Tilpat, one of the five estates or pats over which the traditional conflict of the *Mahabharata* took place about 1000 B.C. (p lviii. Introd.). It was sacked (1035) by Musaud, son of Muhammad of Ghazni. A few motor lorries (S) ply for hire.

55 m **Panipat** junction (D B K.) Branch, 44 m. W. to Jind Jn. and another, 45 m. to Rohtak on the Delhi-Bhatinda line (p. 344). Large civil R.H. at Kabr, about 1 m., and a small P.W.D. bungalow, where travellers can stay after obtaining permission from the Deputy-Commissioner, but they have to make their own arrangements for food. The modern town stands near the old bank of the Jumna, upon a high mound consisting of the debris of earlier buildings.

The principal building of antiquity is the shrine of Kalandar, a celebrated local saint. The legends about him show that he directed the Jumna to move back seven paces, as he had become stiff standing in the water, but in her hurry to obey she moved back seven miles. He gave a charm to the Panipat people which dispelled all the flies, but they grumbled at this, so he brought them back a thousandfold. His body is said to have been buried in three places—namely, at Karnal, Budha Khera, and Panipat.

Panipat is famous as the place where three decisive battles have been fought, but scarcely any sign remains.

Here, on the 21st April 1526, Babar encountered Ibrahim Lodi, King of Delhi. On the night before the battle Babar had sent 5000 men to make a night attack, but the attacking force did not reach the enemy's camp till dawn. The Mughal pickets reported that the Indians were advancing in battle array. Babar immediately prepared for action, and stationed strong flanking parties on the right and left. When the Indians arrived at the Mughal lines they wavered, and Babar availed himself of their indecision to attack, at the same time sending his flanking parties to wheel round and charge them in the rear. Babar's left wing was roughly handled, but he supported it by a strong detachment from the centre, and the Indians in the end were driven back. On the right, too, the battle was obstinately contested, but Babar's artillery was the more effective, and at last the Indians fell into confusion. At noon they gave way in all directions. According to Mughal accounts, 15,000 Indians were left dead, and the pursuit continued as far as Agra. The body of Ibrahim Lodi [1] was found the same afternoon amidst 5000 or 6000 of his soldiers lying in heaps around him, and was specially honoured by the victor. Babar reached Delhi on the third day after the battle, and on the Friday following his name as King was read in the public prayers.

The **Second** great battle was fought on the 5th of November 1556 A.D., when the youthful Akbar, who had just succeeded his father, Humayun, and his General, Bahram Khan, defeated Himu, the General of Muhammad Shah 'Adil, nephew of Sher Shah Sur. Himu had 50,000 cavalry and 500 elephants, besides infantry; [2]

[1] The alleged grave of the King lies on the N.W. side of the city.

[2] Himu, who had driven Humayun's Governor out of Delhi, had the misfortune to lose his guns before the battle.

but after a well-contested battle he was wounded in the eye by an arrow, taken prisoner, and put to death. This battle was decisive of the fate of the Pathan dynasty called the Sur, founded by Sher Shah, 1540-5, and finally established the fortunes of the House of Timur

The Third battle took place on the 14th of January 1761 A D, when the whole strength of the Mahrattas was crushed with terrible slaughter by Ahmad Shah Durani, the Afghan King All the Mahratta Chieftains of note, Holkar, Scindia, the Gaekwar, the Peshwa's cousin and son, were present with their forces The Mahratta army is said to have amounted to 15,000 infantry, 55,000 cavalry, 200 guns, and Pindaris and camp-followers numbering 200,000 men. The Afghan force consisted of 38,000 infantry, 42,000 cavalry, and 70 guns, besides numerous irregulars, and faced north.

The Mahrattas had been cut off from Delhi for two months, and were compelled to fight by impending starvation On the morning of the battle they marched out with the ends of their turbans loose, their heads and faces anointed with turmeric, in sign of despair Seodasheo Rao, the Bhao, cousin of the Peshwa and Generalissimo, with Wiswas Rao, the Peshwa's eldest son, and Mulhar Rao Holkar, were opposite the Afghan Grand Wazir, Shah Wali Khan The great standard of the Mahratta nation, the *Bhagwa Jhanda*, floated in the Mahratta van, and there were three *Janpatkas*, or Grand Ensigns, of the Peshwa in the field

The Mahrattas made a tremendous charge full on the Afghan centre, and broke through heavy cavalry under the Wazir, which unwisely received them without advancing. The dust and confusion were so great that the combatants could only distinguish each other by their war-cries. The Wazir, who was in full armour, threw himself from his horse to rally his men, but most of them gave way, while Ibrahim Khan Gardi, trained by M. de Bussy, who commanded the Mahratta artillery and regular infantry, broke the Rohillas on the right wing of Ahmad Shah's army

Ahmad Shah sent his personal guards to rally the fugitives, and ordered up his reserves to support the Wazir In this protracted and close struggle the physical strength of the Afghans prevailed. A little after 2 P M Wiswas Rao was mortally wounded, and the Bhao, after sending a secret message to Holkar, charged into the thickest of the fight and disappeared Holkar went off, and was followed by the Gaekwar. Madhava Rao Scindia was cut down by an Afghan horseman many miles away, he used to say that he constantly saw in his dreams his grim pursuer gaining on him, and finally leave him for dead

The Mahrattas fled, thousands were cut down, and vast numbers were destroyed in the ditch of their entrenchment The village of Panipat was crowded with men, women, and children, to whom the Afghans showed no mercy. The spot where the Bhao stood to watch the fight is now marked by a small monument, and is about 3 m. E of Panipat

66 m **Gharaunda** A small village on the Grand Trunk Road To the E. of the village are the two handsome gateways of the old Mughal sarai. The Emperor Shah Jahan laid out a road from Delhi to Lahore, marked it at intervals of a kos with large masonry

pillars shaped like acorns and called *kos minar*. At the various stages he erected large *sarais*, or fortified walled enclosures, with numerous quarters for the benefit of travellers Most of the kos minars still exist, but the only remains of the old sarais in the Karnal District are these two gates at Gharaunda. The Grand Trunk Road follows roughly the line of the old route

76 m. **Karnal** Station (D B K, comfortable, near Grand Trunk Rd., 1858), also large Govt Rest House (permit from Exec Eng Ambala), where no meals are supplied

The town of Karnal is traditionally of great antiquity, having been founded by Raja Karna, champion of the Kauravas, in the great war of the *Mahabharata* It was seized by the Raja of Jind about 1763, and wrested from him in 1797 by the Irish adventurer George Thomas It was conferred by Lord Lake in 1803 upon Nawab Muhammad Khan, a Mandil Pathan A British Cantonment existed here from 1811 until 1841, when it was abandoned (the church tower still remains) owing to the unhealthiness of the site, as the W. Jumna Canal intercepted the drainage and caused malarial fever. The canal was re-aligned in 1875 A wall 12 ft. high encloses the town. The Dairy Farm is now under the Imperial Agric Dept., for cattle breeding and agricultural instruction. There is fine black buck shooting 20 m. to the W.

A large up-to-date hospital was erected in 1910-11 as a memorial to King Edward VII.

Karnal is the place where the Persian Kuli Khan, Nadir Shah, defeated the Mughal Emperor Muhammad Shah in 1739 The battle lasted two hours, 20,000 of the Indian soldiers were killed, and a much greater number taken prisoners. An immense treasure, a number of elephants, part of the artillery of the Emperor, and rich spoils of every description fell into Nadir Shah's hands. The Persian loss was small. The next day Muhammad Shah surrendered himself to his conqueror, who marched to Delhi (see p. 283).

97 m. **Kurukshetra Jn.** Branch of 54 m W *viâ* Kaithal to Narwana on the line to Bhatinda junction (p 344)

At 2 m is **Thanesar** (D.B), a famous place of Hindu pilgrimage and a very ancient town, sacked by Muhammad of Ghazni (1011), near which Shahab-ud-din Ghori was defeated by and subsequently defeated Prithvi Raja in 1192 A D. It was the capital of Harsha (606-647), ruling the S E portion of the Punjab

The **Brahmsar** or **Kurukshetra Tank**, 1 m W of **Kurukshetra junction**, an oblong sheet of water 3546 ft. in length, is not only the centre of attraction to pilgrims, but also the haunt of wild-fowl from the pelican to the snipe, shooting is prohibited It is surrounded by temples, and flights of dilapidated steps lead down to the water on all sides As many as 250,000 persons have been known to assemble here on the occasion of an eclipse of the sun, when it is believed that the waters of all other tanks visit this one here, so that he who bathes in it at the moment of eclipse obtains the additional merit of bathing in them all and washes away the sins of his ancestors also. On the W. a causeway stretches out to an island where the best preserved temple stands The ruins of this causeway extend farther S to the remains of other temples.

The area around, known to Hindus as Dharmakshetra, or the Holy Field, was the centre of

Kurukshetra, the great plain of the *Mahabharata* battle of the Kauravas and Pandavas (Introd p. lii) The plain (70 m by 30 m) extends W to Pehowa and Kaithal, both sacred places Kurukshetra is described in Sanskrit literature, and was named Brahmavarta, or land of divine sages, "fashioned by God and chosen by the Creator." On the Sarsuti, a mile N of the town and a mile W of the tank, and all round at various distances, are a number of sacred sites, some identified with places actually mentioned in the *Mahabharata*

The **Town** is about ½ m N of the tank, and beyond it are extensive remains of the Muslim **Fort.** The chief building is the white-domed **Tomb of Shaikh Chilli.** It is an octagon of drab-white marble, lighted by trellis-work windows of fine design. It stands upon a small octagonal platform in the centre of a larger square one surrounded by cupolas. In the centre of the W. side is a small pavilion with deep caves, which also forms a tomb

S.W from here, within a stone's throw, is a small mosque of red sandstone (the **Lal Masjid**), supported on eight columns. The carving on the domes resembles that at Fatehpur-Sikri

Between Thanesar and Ambala are passed the Sarsuti (ancient Saraswati), Markanda, and other torrents issuing from the Siwaliks, and above Ambala the Ghaggar or Drishadvati

The strip of country included between the Sarsuti and the Ghaggar is "the Holy Land" of the Hindu faith, the first permanent home of the Aryans in India, and the spot in which their religion took shape. Hence the sanctity of the waters of the Sarsuti, to which worshippers flock from all parts of India.

31 m. **Kaithal** is the headquarters of the district. The town is situated on the bank of the Bidkiar lake or moat, with bathing places and flights of steps During the time of the earlier Muslim rulers it was a place of some importance In 1767 it fell into the hands of the Sikh Chief Bhai Desu Singh, whose descendants, the Bhais of Kaithal, ranked among the most powerful of the Cis-Sutlej Chiefs This territory lapsed to the British Government in 1843 The ruins of the old fort and residence of the Kaithal family stand out prominently on the high bank of the lake

The civil R H can be used with the permission of the Deputy Commr , Karnal

At *m* 112 is the Markanda river bridge, 1186 ft long (1891)

123 m from Delhi, **AMBALA** Cantonment junction station. Ambala **City** and **Civil Station** are 5 m farther N W (alt 900 ft) The important Cantonments were formed in 1843 , they cover 30 sq. m , and are laid out with good roads and fine trees The centre is occupied by the bungalows of the residents, and to the W are the military lines, and the whole is surrounded by extensive Maidans. In the Badshahi Bagh Henry Lawrence resided (1845)

The Race-course is on the E Maidan ; **Paget Park,** a favourite resort, is on the N The city is the headquarters of the district and the Divisional Commissioner (since 1912)

The Cantonment Church, which is in the Gothic style, was consecrated in 1857, and is one of the finest in India. There are also a **Presbyterian** and a **Roman Catholic**

Church, a Hospital, Charitable Dispensary, and a Leper Asylum.

A Government steam road train worked to Kalka from 1869, 94 m to Simla

At m. 144 is the Ghaggar river bridge, 1505 ft long (1891) Ferry for road transport

163 m **Kalka** station (D B ,R), the terminus of the broad-gauge railway, 2143 ft above sea-level Landing ground on Delhi Kalka air service

A few miles S E of Kalka is the old Mughal Palace of Pinjor, in picturesque gardens, built by Fida Khan, foster-brother of Aurangzeb

The N G mountain railway (1903) from Kalka to Simla, 60 m follows the line of the old Tonga Road (1856) most of the way, it passes round the W and N sides of the Jutogh Hill, and reaches Simla on the N side, the track being carried to the Stn on the S face of the Ridge by a tunnel. The gradient of nearly half the line is 1 in 33, the curve-radius is 120 ft only, there are three loops below Dharmpur and 103 tunnels

Seats booked through the Stn - Master, Kalka Only hand-luggage can be taken into the carriages. Rail motors with fixed timings also run during the season no heavy luggage allowed It is wise to put on warmer clothing at Barogh whenever the upward journey is made in the summer Some people suffer from rail sickness and may prefer to motor by road, it is cheaper and quicker

21 m, **Dharmpur** (D B good) in the territory of the Maharaja of Patiala, 4900 ft. **The King Edward VII. Consumption Hospital** here is due to the initiative of Mr Malabari and the liberality of the Maharaja. **Station for Kasauli** (which can also be reached from Kalka, 16 m., by the old Simla road, now a bridle-path), Sanawar and Sabathu

A good and well-graded road goes up below Sanawar to

9 m **Kasauli** (22 m from Kalka by motor service) A Cantonment and convalescent depot on the crest of a hill overlooking the Kalka Valley, and 6322 ft above sea-level The views from it are very grand and extensive At Kasauli are the chief Pasteur Institute of India and the Central Research Institute, and a Food Laboratory

The bridle-road continues on through *Kakarhatti*, *Sairi*, and *Jutogh* (see below) to Simla (41 m).

3 m off, across a dip, the road rises to **Sanawar**, which, however, is not quite so high as Kasauli. Here are the Lady Irwin Tuberculosis Sanatorium and the **Lawrence Royal Military School** From it may be seen Dagshai and Sabathu, and in the far distance Simla. The ground was made over to the School (started 1841), by Honoria Lawrence, in 1858, in fulfilment of the wish of Sir H. Lawrence There are separate barracks for boys, girls, and infants, and a chapel Soldiers' children of pure European parentage take precedence as candidates for admission, orphans have the preference over all others The other Lawrence Schools are at Mount Abu (p 207), Murree (p 368) and Ootacamund (p 631).

From Dharmpur another road leads N 10 m. to **Sabathu** (1816) between the old tonga and bridle-roads. The next station,

24 m **Kumarhatti** (5200 ft.), serves the Cantonment of **Dagshai**.

The railway now passes under the Barogh Ridge (the road goes over the top 900 ft. higher) by a tunnel of 3756 ft., and at Barogh station (5020 ft) clothes can be changed

The line runs high above the fine valley of the Giri, famous for its mahsir fishing, to

29 m **Solon** (H and D B), in the State of the Rana of **Baghat**, 4900 ft , East Punjab University, 1947.

37 m **Kandaghat**, the level has fallen to 4698 ft station for the Patiala summer capital, Chail The line then turns N and ascends the slopes high above Sabathu until it reaches a level run round to

53 m **Tara Devi**, passing under the bold cliffs of that peak. It then winds round the W and N slopes of Jutogh Hill, the Tonga Road rising 1500 ft up the S face, through fine woods of pines and rhododendrons, and reaches

56 m. **Jutogh**. Curving round the N side of the hill the railway passes Summer Hill, and by a tunnel to Simla, 60 m on S of the Ridge ½ m farther East is the terminus for goods traffic

The hill resort of **SIMLA** * consists of the lofty (8048 ft.) mountain of Jakko to the E , which is connected with Observatory Hill and Prospect Hill on the W by a long ridge. On the N side of Jakko is Elysium Hill, so called in compliment to the sisters of Lord Auckland, who resided on it with their brother On the S. side the long spur of Chhota Simla, with the residence of the Governor of the Punjab at Barnes Court above, and the Punjab Govt. Secretariat at Ellerslie, leads to the stream which drains the amphitheatre formed by the Mahasu range, and through the **Kasumpti Bazar** to **Junga** (8 m), capital of the Keonthal State

On the S face of the Ridge (alt 7186 ft.), where it starts from the slope of Jakko, is the Indian bazar, and on it are Christ Church, and the Town Hall, the Post Office and Telegraph Office Above the main road, called the Mall, is the Grand Hotel, and below are the District Courts, and Westward of them large blocks of Government of India offices, including the Army General Headquarters, near the railway goods terminus. Farther on again, on a knoll, are large offices, known as "Gorton Castle," of the Government of India, below which on the W is the Council Chamber of the Legislative Assembly On the S side is a link between the Mall and the Tonga Road, and on the N. side are the paths leading *to Annandale (see p 326)*

Past the Hotel Cecil, on the S of Chaura Maidan, is Peterhoff Hill, on which the old Government House stands, with the Department of External Affairs below The Mall winds on the N side of this Hill to Observatory Hill, on which stands Viceregal Lodge, the summer residence of the Viceroy It was first occupied in 1888 by Lord and Lady Dufferin during their last year of office. Since that year until 1947 all the Viceroys made it their summer headquarters, and various improvements were effected The Sessions of the Council of State were held in the Council Chamber, which was completed in 1913-14, to form an extended wing of the main building Below Observatory Hill on the S is Boileauganj W. of Viceregal Lodge is Prospect Hill (7140 ft), with a grand view down to Sabathu and up to Kasauli ; beyond it (3 m) is Jutogh, and N of it is

the spur of Summer Hill. There are many beautiful walks round Jakko and some of the other hills; from the top of Jakko, famous for its fakir and the monkeys which haunt the temple, there are fine views of Chor mountain (10,000 ft.) to the S.E., and of the snows when the weather is clear. One of the prettiest walks leaves the Mall near the S. approach to the U S Club (which stands over the Combermere ravine running down the W face of Jakko to the S side of the Ridge), and winds down the lower slopes of the Chhota Simla spur (on which lie the old Brewery and the Cemetery) as far as Bishop Cotton's school Snowdon, the residence of the Commander-in-Chief, the Walker Hospital, founded by Sir James Walker, C.I E., and the Mayo Orphanage, are on the Mall on the N side of Jakko, and the Convent schools are situated at the S E. corner Elysium Hill runs N through the Lakkar Bazar

The land upon which Simla stands was retained by the British at the close of the Gurkha War (1814-16), when most of the surrounding district was given or restored to various States Lieutenant Ross erected the first residence, a thatched wooden cottage, in 1819 His successor, Lieutenant Kennedy, in 1822 built a permanent house,[1] and in 1826 Simla became a settlement

In 1827 Lord Amherst spent some months at Kennedy House, and from 1828 Simla grew in favour with Europeans. It was ceded by Patiala in 1830. Since the Viceroyalty of Sir John Lawrence in 1865 Simla has been the summer capital of the Government of India. At the end of March, the Supreme Government quits Delhi for Simla, which is largely deserted in the winter, though several of the General Headquarters Offices remain all the year round. Simla is lit by electricity, installed 1913.

The distances at Simla, taken from Christ Church, are—Round Jakko, 5 m ; Boileauganj, 2½ m ; to the end of Chhota Simla, 2 m , round Elysium Hill, 2¼ m.

Annandale is a fairly extensive artificial terrace, in a valley 1200 ft below the Ridge on the N The *Race-course* surrounds it, and it contains *Gardens* and the *Cricket Ground* and some very fine deodar-trees. W. again of Annandale is the **Glen**, a catchment area and Bird Sanctuary

Mashobra and **Mahasu** (5 m and 8 m. from Simla) are pleasant places. The Viceroy has a summer Retreat at Mashobra, where there is a good hotel; another at Mahasu and golf course on the ridge. 8 m beyond Mashobra is *Naldera*, a fine wood of deodars with a picturesque timber temple from which a glimpse of the Sutlej may be obtained 5000 ft below.

A magnificent view of the snows E of Kulu is obtained from **Narkanda** (9600 ft) and from the Bhági Forest beyond it The stages of the route, each (except Mahasu) with a D.B., are as follows .—

Name of Stage	M	Above Sea-level
Mahasu from Simla	8	8200 ft.
Fagu	12	8200 ,,
Theog	17	7700 ,,
Mattiana	28	7720 ,,
Narkanda	39	9500 ,,
Kotgarh	49	6000 ,,

Three marches up the Sutlej Valley from Narkanda is Rampur, from which the fine wool used in Rampur *chadars* used to come. 70 m beyond Rampur is Chini, E of which two routes crossing

[1] Sir Edward Buck s *Simla, Past and Present* (2nd ed , 1925) may be consulted

the Shipki and Sholarang Passes lead to the uppermost course of the Sutlej and Gartok (14,200 ft high). The track has been improved, and is a fairly passable route for trade with Tibet.

The control of the Simla Hill States was transferred to the Govt of India in 1936

The Political Agent, Punjab Hill States, Simla, publishes a statement of rates of hire authorised in the case of Government transport on principal routes within the Simla District (1) The rate for a mule is Rs 2 per stage, and Rs 1 a day for halts, (2) for a riding-pony, Rs 4 per stage and Rs 2 a day for halts, (3) for a rickshaw, apart from the coolies, Rs 1 ans 8 per day, (4) if coolies are taken more than one march out of Simla, half rates are payable for the return journey, (5) if coolies or mules are engaged through a *Chaudhri*, the following sums are due as commission—(*a*) coolies, an 1 per stage, (*b*) mules, as. 4 per mule for the entire journey.

On the *Hindustan-Tibet Road*, from Simla to Rampur and on to Shipki, the distances are as follows (5 m or less are half a stage, 6 m or more are one stage).—

	Miles
Simla to Kufri (P W D, R H)	8
Kufri to *Fagu (D B)	4
Fagu to Theog (D B)	5
Theog to Matiana (D B)	11
Matiana to Narkanda (D B)	11
Narkanda to Kotgarh (D B)	10
Kotgarh to Nirat (P W D R H)	10
Nirat to Rampur ,,	13
Rampur to Gaora ,,	7
Gaora to Sarahan ,,	10
Sarahan to Taranda ,,	14
Taranda to Paunda ,,	5
Paunda to Nachar ,,	5
Nachar to Wangtu ,,	3
Wangtu to Urni ,,	10
Urni to Rogi ,,	10
Rogi to Pangi ,,	10
Pangi to Rarang	8
Rarang to Jangi (P W D, R H)	7

* Simla to Fagu the rate is R 1 ans. 12 per coolie if hired in Simla, including the Chaudhri's commission

	Miles
Jangi to Kanam	10
Kanam to Siasu	10
Siasu to Poo	10
Poo to Namgia	11
Namgia to Shipki	10

There are other routes which can be taken, viz —(1) Narkanda to Daranghati, 7 stages, 74 m, (2) Narkanda to Luri Bridge, 1½ stages, 10 m, (3) Simla to Rampur, 9 stages 2 half-stages, 96 m (*viâ* Kotkhai and Jubbal), (4) Fagu to Rohru, 13 stages and 1 half-stage, 129 m (*viâ* Mandhol), (5) Simla to Lun, 5 stages 3 half-stages, 49 m, (6) Simla to Kalka, 5 stages, 58 m.; (7) Simla to Kalka (*viâ* Kasauli), 5 stages 1 half-stage, 43 m., (8) Simla to Nalagarh, 7 stages 4 half-stages, 54 m; (9) Simla to Bilaspur, 3 stages 2 half-stages, 50 m, (10) Bilaspur to Kalka, 7 stages, 67 m.

There are R Hs or D.Bs. at only some of the places on these routes The official statement should be studied before starting in case of alterations

Another route, from Simla to Mussoorie, 151 m, is a favourite excursion in the hills The following itinerary has been supplied by one who has taken it —

Simla to Mussoorie (151 m)

	Miles	Feet
Simla (7000 ft) to Fagu (D B)	12	8200
Fagu to Sainj (B)	8	4400
Sainj to Kotkhai (B)	13½	5000
Kotkhai to Jubbal (R H.)	14	6000
Jubbal to Arakot (F B)	17	3650
Arakot to Tiuni (F B)	9	3900
Tiuni to Kathian (F B) { Road, 12 / Path, 0 }		6600
Kathian to Mundali (F B)	12	8200
Mundali to Deoban (F B)	1	9000
Deoban to Chakrata* (D B) (to bungalow)	6	6900
Chakrata to Churani, or Chaurani Pani (D B)	9	7200
Churani Pani to Lakhwar *(D B)	12	3700
Lakhwar to Mussoorie (p 423)	15	6500

All bungalows are furnished, but crockery, cutlery, and cooking utensils must be taken for use in

the bungalows other than those marked * (D.Bs.). In the Forest bungalows there are only beds and other furniture for two persons, so camp-beds, etc, should be taken if the party consists of more than two

The road is passable for riding-ponies all the way Mules for transport (*Rs 2 per diem*) are obtainable through the Mule Contractor at Simla Printed rates can be seen at the Cutcherry

Bungalows at Sainj and Jabbal (Deora), which are in Hill States, can be occupied on application to the Pol Agent, Punjab Hill States, Simla. Leave to occupy F B s at Arakot, Tiuni, Kathian, Mundali, Deoban, must be obtained from the Divisional Forest Officer, Chakrata

A number of routes from Simla, in the neighbourhood, to Kashmir and in the Himalayas, will be found in Appendix III of Sir E Buck's *Simla, Past and Present*, with useful " Hints to Travellers in the Himalayas and Simla Hills "

Sultanpur (see also p 342), the old residence of the Chiefs of Kulu, in the **Kulu** Valley (see *To Kulu and Back*, by M C Forbes), is approached by way of Simla, it is a long and somewhat tedious expedition, but the scenery cannot be surpassed for grandeur, and the forests abound in pheasants and other game. Farther up amongst the high peaks sportsmen will find ibex and bears The marches from Narkanda to Sultanpur are indicated in a table opposite

At Bajaura, 9 m from Sultanpur, there is a stone temple, dedicated to Siva, with very fine carvings Three niches in the outer wall contain bas-reliefs representing Ganesh, Vishnu, and Parvati slaying the demons On both sides of the entrance are figures of the river goddesses Ganga (the Ganges) and Yamuna (the Jumna) (see *Archæological Survey Report* for 1909-10)

One march N of Sultanpur is Nagar (p. 350), the headquarters of the Kulu Subdivision, and two marches Manali (6300 ft) and Kothi (8000 ft.) farther on, through the lovely scenery of the Upper Bias Valley, is the Rohtang Pass (13,200 ft.) into Lahaul.

At Manali is the wood-carved temple of the goddess Harimba, or Hirma Devi, once the patron goddess of the Kulu Valley, to whom human sacrifices used to be offered.

(2) Delhi to Lahore *viâ* Ghaziabad

On leaving Delhi Central Station,

The line crosses the Jumna by a bridge of 12 spans of 293 ft, with a roadway beneath It was opened on 1st January 1867, and was doubled in 1913

4 m **Delhi-Shahdara** 4½ m S of this and near Patparganj is the field of the Battle of Delhi, in which Lord Lake defeated the Mahratta troops under M Bourquien on 11th September 1803 An obelisk on the spot commemorates the officers who fell in the engagement

N.G ry, Shahdara, 92 m N to Saharanpur (p 331)

13 m **Ghaziabad** junction From this point the E I R (opened 1864) runs S E to Allahabad and Calcutta (Route 21), and (Oudh and Rohilkand section) E. to Moradabad (100 m) (Route 20), crossing the Ganges canal and the Ganges at Garmukhtesar (m 59) bridge, 2332 ft long (1901) Near Ghaziabad, then called Ghazi-ud-din-nagar, a small force under Brigadier-General Archdale Wilson twice defeated the Meerut and Delhi mutineers on 30th and 31st May 1857

42 m. from Delhi, **Meerut** city station. (By road, 42 m to Delhi, 81 m to Aligarh; 14 m. to Sardhana; 65 m to Roorkee, 32 m to Bagpat, on the Jumna)

45 m **Meerut** Cantonment (D B)

vious day for refusing to receive cartridges of the old pattern). The Europeans, including troops, without arms, were at evening service, but the plan to murder them miscarried The mutineers

MARCHES FROM NARKANDA TO SULTANPUR

From	To	Height above Sea-level	Accommodation	Country	Distance
		Feet			M
Narkanda	Luhri	2500	G B Vil on N side of Sutlej	Descent of 6500 ft in	12½
Luhri	Ani	4100	G B. and vil Salvation Army Fruit Farm and Mission.	Cross Sutlej, gradual descent for 5 m and easy ascent for 6½ m	11½ in all
Ani	Khanag	8300	G B. and vil	Steep ascent	9
Khanág	Shoja	8800	G B. No vil	Cross Jalori pass at 10,570 ft.	7
Shoja	Banjar	5000	G B and vil., tahsil, thana, hospital, school	Descent all the way	10½
Banjár	Lárji	3100	Bungalow badly placed, accommodation poor, small vil	Grand gorges of Bías, Sanj and Tirthan rivers, descent nearly all the way	12
Lárji	Bajaura	3600	G B (with khansama), post and telegraph office	Up Bias River, gradual ascent	11
Bajaura	Sultanpur	3994	G B, hospitals for men and animals, thana, tahsil, R H. and D B, post and telegraph office	Gradual ascent up Bías River	9

Note —G B = good bungalow but seldom has furniture or khansama

(combined pop in 1941, 169,290) It was the scene of the outbreak of mutiny of the Bengal army (on Sunday, 10th May 1857) The trouble began with the 3rd Bengal Cavalry (85 troopers of this regiment having been imprisoned and degraded the pre-

(consisting of the 3rd Bengal Cavalry and the 11th and 20th Bengal Infantry) marched off to Delhi unpursued, but some returned 105 were promoted, and 3 received the Order of Merit

British troops consisted of the 60th Rifles, the Carabineers, and

one battery of Horse Artillery and of Foot Artillery.[1]

The station is very extensive, measuring 3½ m. from the railway on the W. to the police lines on the E., traversed by the **Mall**, and 3 m. from where the Bulandshahr Road, on the S., leaves the station, to the end of Church Street. The European Cavalry Barracks are of remarkable extent. As in 1857, these and the other British Barracks lie to the N. of the Church, and the lines of the Indian troops to the S.

St John's Church, completed 1821, in the Italian style, was the first Church erected in the Upper Provinces of India. There are tablets in it to a great number of officers who have been killed in action or have died in Upper India.

The large **Cemetery**, which lies to the N.W. of the Church, is divided into two parts—the new being marked by crosses and English tombs, the old by cupolas and pyramids. A pillar, 50 ft. high, was erected to Sir R. Rollo Gillespie, who subdued the mutiny at Vellore (p. 599), and fell in the Gurkha War. Sir D. Ochterlony, who joined the Bengal Army in 1777 and died in 1825, after 48 years' continuous residence in India, is also buried here.

The site of the old **Central Jail**, (now abolished) is occupied by the Victoria Park. A 12-hole golf-course is 3 m. N.E. of Meerut on the Bijnor road.

Temples. — The *Suraj Kund*, commonly called by Europeans the "Monkey Tank," filled by water from the Ganges Canal, lies W. of Victoria Park. It was constructed by Jowahir Mal, a wealthy merchant, in 1714. There are numerous small temples, dharmsalas, and *sati* pillars on its banks. The *Baleswar Nath Temple* is the oldest in the District, and dates from before the Muslim invasion. The *Darga* of Makhdum Shah Wilayat, standing near the Collector's office, is said to have been built by Shahabu-d-din Ghori. The *Darga of Shah Pir* is a fine structure of red sandstone, erected in 1628 A.D. by Nur Jahan, in memory of a pious fakir of that name. The *Jami Masjid* is said to have been built in 1019 by Hasan Mahdi, Wazir of Mahmud Ghaznavi, and was repaired by Humayun. The *Makbara* of Salar Masa-ud Ghazi is supposed to have been built by Kutb-ud-din Aibak in 1191. There are two large *Imambaras*—one near the Kamboh Gate and another in the Zabidi Mahalla—an *'Idgah* on the Delhi Road, built in 1600, and a mosque built by Nawab Khairandesh Khan in the Saraiganj. Besides these there are 62 mosques and 60 temples of no particular interest.

Before reaching Sardhana the Ganges Canal, made by Sir Proby Cautley, is crossed. It is about 200 ft. wide here. At seven falls there are electric power stations.

52 m. **Daurala** station for **Sardhana** (D.B.), connected with Walter Reinhardt, of Walloon origin, known as Samru, or Sombre, from his swarthy complexion, who came out to India in the French service, about 1750. He became leader of a band of European deserters and sepoys, whom he brought to an unusual state of discipline, and he joined one Gregory (Gurgin), an Armenian, who was high in the favour of Mir Kasim,[1] the Nawab of Bengal. After the fall of Monghyr (p.

[1] The story is told in Colonel Sir A. R. D. Mackenzie's *Mutiny Memoirs*.

[1] Mir Kasim died a beggar in Delhi, his last shawl being sold to defray his funeral expenses.

462) he did his employer the base service of putting to death, on 6th October 1763, all the 60 English gentlemen and 100 others, all prisoners, who had been collected at Patna (p 62). He joined the Bharatpur Chief (1765) but (1773) went over to Najaf Khan of Delhi, from whom he received a grant of the Pargana of Sardhana He died at Agra in 1778.

His Begam, originally a Kashmir dancing-girl, was recognised as his widow, and succeeded to his domains. She became a Roman Catholic in 1784, and married a French adventurer named Le Vaissoult (1792), who, having shown himself incompetent, was induced to commit suicide. The revolt which he had caused was quelled by the aid of the Irish adventurer, George Thomas

On the death (1802) of Zafaryab Khan, legitimate son of Samru, the Begam gave his daughter in marriage to Colonel Dyce, her manager, and their son, David Ochterlony Dyce Sombre, whom she adopted, married in 1840 the Hon Mary Jervis, daughter of the second Viscount St Vincent, afterwards Lady Forester

Sardhana came under British protection in 1805 and lapsed to the E.I Company upon the Begam's death in 1836. According to Major Thorn, who saw her in 1806 "She appeared to be about fifty-three years of age, of middling size and fair complexion She was a constant attendant at headquarters, dressed in the European style with a hat and veil, sometimes riding in a palanquin, and at other times on a horse or an elephant" (*Memoir of the War in India*)

E. of the town is a modern English mansion, built 1834, and called the Palace, with a grand flight of steps at the entrance. It stands in a garden of 50 acres, and is commonly known as the **Kothi Dilkusha**. The house was sold in 1893 for Rs.25,000 to the Roman Catholic Mission at Agra for use as a School and Orphanage. At Government House, Allahabad (p. 47), are portraits of the Begam in her old age (by W. Melville of Delhi) and of Dyce Sombre wearing a papal decoration; also pictures of the Begam presenting a chalice to the clergy at Sardhana and of General Allard, a French cavalry officer who fought at Waterloo and, entering the service of Ranjit Singh in 1822, died at Peshawar in 1839. These were formerly in the palace; other pictures from the collection are in the Indian Institute at Oxford

The R C. Cathedral, built by the Begam Samru, is outside the town on the S. It stands in an enclosure surrounded by an ornamental wall By the side entrance, on the right, is the Begam's white marble monument, made at Rome Close by is the **R.C. College**, which was once the Begam's own residence It is intended for the instruction of Indian priests, and was endowed by the Begam.

79 m Muzaffarnagar (D B K)

111 m. from Delhi, *viâ* Ghaziabad, is **Saharanpur** junction station (R, D B). Pop 108,263, alt 797 ft., a railway colony. From Saharanpur the O and R section of the E I. Ry runs S.E. to Lucknow and Benares (Route 20). Passengers change here for Dehra Dun and Mussoorie (*viâ* Lhaksar jn.) and also for Naini Tal (*viâ* Bareilly jn. and Kathgodam). Saharanpur is, by road, 42 m. from Dehra Dun, and 77 m. to Chakrata.

The town was founded in the reign of Muhammad Tughlaq about 1340, and named from Shah Haran Chishti, whose shrine is still much visited by Muslims and Hindus also It was a favour-

ite place of summer resort of the Mughal court In the reign of Shah Jahan a royal hunting-seat, called Badshah Mahal, was built by 'Ali Mardan Khan, the projector of the **Eastern Jumna Canal**, never of much utility till the District came under British rule, when Sir P Cautley (1802–1871) reconstructed it, and since then cultivation has spread on every side In 1814 it was the base of Rollo Gillespie for the Gurkha War

There are an Anglican Church, consecrated in 1858, and an American Presbyterian Church, and a mission from that body An old Rohilla fort was built by Najib Khan Amir ul Amara, granted a jagir in 1757 A handsome modern mosque has been erected on the plan of the Jami Masjid at Delhi

The **Government Botanical Gardens** attained their centenary in 1917 Many valuable plants have been acclimatised as well as a large number of English vegetable seeds, which together with flower seeds are produced in large quantities for sale to the public Fruit-trees are propagated and distributed throughout India, and the gardens contain a valuable collection of fruit trees Near the E gate is the fruit garden known as the Alsi Bagh The Garden Supt 's office is near the pot nursery There are also a Hindu temple and wells in the gardens, and the S.E gate leads to some *sati* monuments and *chhattris*

At Nojli, near Saharanpur was a tower whence the **Trigonometrical Survey** of the Himalayas was extended north in 1835 The snowy peaks add much sublimity to the view to the N

At m. 125, near Kalanaur, the Jumna river bridge has seven spans of 200 ft. (1913), and at m 151 the Markanda river is crossed (rail and road bridge).

The railway then crosses the watershed of the Indus and Ganges rivers, 900 ft above sea-level

164 m from Delhi, *viâ* Ghaziabad, and 123 m *viâ* Panipat, is **Ambala** Cantonment station (p. 323), beyond which the Ghaggar river is crossed by a bridge completed 1869 Mileages are now given *viâ* Panipat.

141 m **Rajpura** junction (D B.). From here a branch line runs S W 108 m , to Bhatinda, past 16 m , Patiala, and 32 m , Nabha, the capitals of two Jat Sikh States, which, with Jind, form the three Phulkian States of the Malwai Sikhs, who lie S of the Sutlej, the Manjha Sikhs occupying the Bari Doab across that river All three States became independent about 1762, and, when threatened by Ranjit Singh in 1806, sought British protection, which was afforded by the Treaty of Amritsar (1809) with the Maharaja They rendered great assistance during the Mutiny of 1857, and received accessions of territory

Patiala is the capital of the wealthiest and most populous State in the Punjab, extending over an area of 5942 sq m The Palaces of the Maharaja in the Baradari Gardens and at Moti Bagh, the Mohindar College, the Fort (Museum), the Temple of Mahakali and Rajeswari, and King Edward Memorial are the chief buildings The Clinical Research Laboratory is an Antirabic Centre There are fine cricket and polo grounds. The Maharajadhiraja, His Highness Colonel Sri Sir Yadavindar Bahadur, G C I E., G.B.E., was born in 1913 and succeeded his father in 1938 A Bhatti Rajput, he traces descent from Baba

Ala Singh, who founded Patiala (1753). The Indian State Forces have taken part in both World Wars.

Jind, the second of the Phulkian States, has an area of 1299 sq m The town is on the Delhi-Bhatinda-Lahore line (p. 344), but the capital is Sangrur, on the Ludhiana-Jakhal Railway (p 335) Its principal buildings are the Diwan Khana, the Baradari, the State Library, Skating Rink, Ranbir Silver Jubilee Orphanage, Lady Minto Ranbir Girls' School, and Victoria Golden Jubilee Hospital · also a D B Col H H Maharaja Sir Ranbir Singh Rajendra Bahadur, G.C S I , G C.I E , received his full powers in 1899 The Indian State Forces saw active service during the World Wars

The third of the Phulkian States, **Nabha** (D B.K), covers an area of 947 sq m Maharaja Partap Singh, K.C.S I (born 1919), was placed on the *gadi* in 1928 There are Indian State Forces

From Nabha the line runs W. to Bhatinda (p 344), and is crossed at Dhuri by the line from Ludhiana (see p 334) to Jakhal

156 m from Delhi, *vid* Panipat, is **Sirhind** junction, a name formerly applied to a very extensive tract, which included the Ambala District and the States of Patiala, Jind, and Nabha In Cunningham's *Archæological Survey* (ii 205) a very interesting account of it will be found Many Afghans of Shah Shuja's family while in exile and other Muslims of note are buried here

It is mentioned by Ferishta as the most Eastern possession of the Brahman Kings of Kabul. After the conquest by Mahmud of Ghazni it became the frontier town of the Muslims, whence its name of Sirhind, or Sar-i-hind, "Frontier of Hind" In 1191 A.D. it was taken by Shahab-uddin Ghori, and besieged by Rai Pithora (Prithvi Raja) for thirteen months

The fort (built by Sher Shah Jur) formed a quadrilateral with Bhatinda, Hanumangarh, and Hissar Humayun recovered India by defeating Sher Shah here (1555). Between 1556 and 1707 Sirhind was one of the most flourishing cities of the Mughal Empire Heaps of brick ruins surround the old city In 1709 the city was plundered by the Sikh Chief Banda, who put the Mughal governor, Wazir Khan, to death in revenge for the murder of Guru Govind's mother and children (1704). Banda was taken and executed 1715. In revenge, in December 1763, Sirhind was taken and totally destroyed by the Sikhs. The finest and oldest building is the

Tomb of Mir Miran. This is of stone, and is surmounted by a large central dome on an octagonal base, with a smaller dome at each of the four corners on a square base, generally resembling tombs at Delhi The dead walls are relieved by squares of blue enamelled tiles This tomb is a specimen of the later Pathan architecture

The **Largest Tomb** is a plain brick building, attributed to Saiyid Khan Pathan, with a central dome of 40 ft diameter On another red brick building, attributed to *Khoja Khan*, the dome is 36 ft in diameter outside. This building is probably of the 15th century

An octagonal **Tomb of Pirbandi**

Nakshwala (or the painter), on open arches, is surmounted by the pear-shaped dome of the Mughal period. The body of the building is profusely covered with paintings of flowers, and the roof with glazed tiles, arranged so that the melonlike divisions of the dome are marked by dark blue lines, and the intervals by coloured tiles laid herring-bone fashion, beginning with yellowish pale green at the top, and ending with dark green at the bottom The only mosque worth mentioning is that of *Sadan Kasai*, to the N. of the present town The W. end has fallen down The centre space is covered by a dome 45 ft in diameter

The *Haveli* or mansion of Salabat Beg, perhaps the largest specimen of domestic architecture of the Mughal Empire, consists of two great piles of brick, each 60 ft. sq. and about 80 ft high, connected by high dead walls

The great *Sarai* of the Mughal emperors is to the S E of the city. It is now used as a public audience - hall by the Patiala authorities, and is called the *Amkhas*

Beyond Sirhind at Doraha the railway crosses the **Great Sirhind Canal.** It takes off from the Sutlej at Rupar, and, passing through Ludhiana and Patiala, with side branches to Nabha, Jind, and other States of the Punjab, eventually irrigates the S. half of the Ferozepore District. At Rupar, which is the terminus of a branch line, 33 m from Sirhind, Lord Wm Bentinck had a famous meeting with Maharaja Ranjit Singh in October 1831, and which led to an alliance

194 m. **Ludhiana** junction (D.B.K.), headquarters of a District, on the S. bank of the Sutlej, 8 m. from the present bed of the river. It is a great grain market, and chief centre in the Province for hosiery and silk materials. The Fort lies to the N W. of the city, and under it is a **Shrine of Piri-i-Dastgir**, or 'Abdul Kadir Gilani The Fort is now occupied by the Government Hosiery Institute

Ludhiana was founded (1480) by two Shahzadas of the Lodi family In 1809, following the Treaty of Amritsar with Ranjit Singh, Colonel Ochterlony occupied it as Political Agent for the Cis-Sutlej States, and from 1834 to 1854 the town was a military station Shah Shuja, expelled from Afghanistan, resided here 1816-33 and again 1834-38 The **Church and Public Gardens** are to the S of the city An old cemetery dates from 1809 There has been an American Presbyterian Mission here since 1840.

The N India School of Medicine trains Indian Women as sub-assistant surgeons The school is managed by the Medical Missionary Society

Three of the great battles of the First **Sikh War** were fought between Ludhiana and Ferozepore—viz., Mudki, Ferozeshah, and Aliwal. The first two are noticed at p. 346. **Aliwal** lies 16 m W. of Ludhiana In the battle here Sir Harry Smith defeated a body of Sikhs under Sirdar Ranjodh Singh. An *Obelisk* bears the inscription, "Aliwal, 26th January 1846," repeated in Persian and Gurmukhi

Ludhiana is an important junction on N.W Railway for the three lines—Main Line, Ludhiana-Ferozepore Cantonment (p. 346)

(77 m.), and Ludhiana-Dhuri-Jakhal-Hissar (131 m.)

27 m. from Ludhiana on the Jakhal branch is **Maler Kotla**, the capital of a Muslim State. The Nawab, Lieut.-Col. H.H. Sir Ahmad Ali Khan Bahadur, K.C.S.I., K.C.I.E., who is of Afghan descent, was born in 1881 and succeeded in 1908.

49 m. on the same branch line is **Sangrur**, the capital of the Jind State (p. 333).

202 m. **Phillaur**, beyond the Sutlej, crossed by a bridge of 5133 ft. (1870), built for the railway, but now used for the Grand Trunk road. The railway bridge, 2322 ft. (1910), has some piers sunk to 105 ft. below the bed. The old Mughal Sarai and Sikh Fort of Phillaur was just saved from the mutineers in May 1857 by the despatch of British troops from Jullundur (31 m.), where the sepoy regiments mutinied on 7th June. Mr. T. H. Thornton (C.S.I.), an Assistant-Commissioner of a few weeks' standing, cut the bridge of boats, and Mr. G. H. M. Ricketts (C.B.), the Deputy-Commissioner, faced them with a few of Rattray's Sikhs, but the mutineers got past them and went on to Delhi.

229 m. **Jullundur Cantonment** station (D.B.K.). Branch, 24 m., to Hoshiarpur, headquarters of a Division and District (1846). The city (station 3 m. farther N.) has a population of 135,283. Anciently it was the capital of the kingdom of Jalandhar, or Trigarta, which, after the invasion of Mahmud of Ghazni, survived in the Hill State of Kangra (see p. 342). Hiuen Tsang, the Chinese pilgrim of the 7th century A.D., describes the town as 2 m. in circuit; *now two ancient Tanks* are all that are left of this. Under the Mughal Empire it formed the capital of the country between the Sutlej and the Bias. The modern city consists of a cluster of wards, each formerly surrounded by a wall. There is a fine *Sarai* built in 1857 by Shaikh Karam Bakhsh, a former Subadar.

The **Church**, ½ m. S.E. of the artillery lines and erected in 1852, is a long building without any tower. The **American Presbyterian Mission** maintains an excellent school.

The **Cantonment** was established in 1846, and has an area of 7½ sq. m. Though a British Regiment (the 8th King's) and a Battery of Artillery were present here in May 1857, no steps were taken to disarm the Regiments of Bengal Infantry. These mutinied on 7th June and started for Delhi, although a number remained loyal and took part in the Siege of Delhi, re-formed as the Wafadar (Loyal) Battalion.

The **Public Gardens** are in the Cantonment.

12 m. from Jullundur City junction, on a line which runs through Lohian Khas to Ferozepore Cant. jn. (40 m.), is **Kapurthala**, the capital of a Sikh State, which can also be reached by road 15 m. N.W. from Jullundur City. Col. H.H. Maharaja Sir Jagat Jit Singh Bahadur, G.C.S.I., G.C.I.E., G.B.E., born 1872, succeeded 1877, and was invested with full powers

in 1890. He was one of the representatives of India at the Assembly of the League of Nations in 1926, 1927 and 1929. The State proper covers 599 sq m. The Maharaja is also one of the largest *talukdars* (landholders) in Oudh. The Indian State Forces have done good service

The Jalaukhana palace is in the French Renaissance style A sword of Jassa Singh, a legendary ancestor, is in the Treasury

249 m to 252 m Between **Dhilwan** and **Bias**, the river Bias is crossed by a bridge 1899 ft long (1910), doubled in 1914, replacing one 3828 ft long (1869), now used for the Grand Trunk road

278 m **AMRITSAR** junction (D B K, about ¼ m W of the city) *may be visited by road from* Lahore A branch line goes N E 67 m to Pathankot for Dalhousie, etc (see p 341). Another branch line goes S to Tarn Taran and Kasur (56 m) A third runs N to Narowal, 45 m (for Sialkot, 84 m., and Jammu) and gives access to the Sikh shrines at Kartarpur and Dera Baba Nanak (p 340)

Amritsar, a city with a pop (1941) of 391,010, and the hdqrs of a District, is the religious capital of the Sikhs, founded in 1577 by Ram Das, 4th Guru of the Sikhs, upon a site granted by the Emperor Akbar around a sacred tank, from which the city takes its name, "Pool of Nectar" Ahmad Shah Durani destroyed it in 1761, blew up the temple, and defiled the shrines, it was rebuilt in 1764 After Ahmad Shah's retirement the city was divided amongst the various Sikh Chiefs, to each of whom was assigned a separate ward, but it gradually passed into the power of the Bhangi Misl, who remained supreme till 1802. In that year Ranjit Singh seized it, and roofed the great shrine with sheets of copper gilt, hence it was called the Golden Temple. He also built in 1805-1809 on the S W the Fort of Govindgarh in order to overawe the pilgrims, and surrounded the city with a massive wall, the greater part of which has been demolished

The manufactures for which Amritsar is most famous are those of Pashmina, silk, and carpets. (Pashmina is the name of any fabric made from the fine wool of a breed of goats found in and beyond the Himalayas.) Pashminas are either plain self-coloured cloths made in lengths, or woven into plain or embroidered shawls, some of which are known as Rampur chadars, but are now out of fashion. The carpet industry also has declined Kashmiris and Punjabi Muslims are chiefly employed There is a Government Weaving Factory, also Punjab Irrigation Workshops The manufacture of silk piece-goods is still carried on

Gold and silver thread, ribbon, spangles, etc, for embroidery, are also manufactured. Ivory carving is practised, chiefly confined to combs, paper-knives, card-cases, and toys, and copper repoussé dishes are made

The materials for these manufactures are brought from all parts of Central Asia, and the merchants —Kashmiris, Afghans, Nepalese, Bokhariots, Baluchis, Persians, Turcomans, Tibetans, Yarkandis, and others—may be seen in their national and highly picturesque costumes Besides raw materials, they bring specimens of their own national manufactures and embroideries. Amritsar is also a depot for the Central Asian markets

The city has twelve gates, of which the only old one is that on the N. facing the Rambagh. The direct road S from the railway station to the Golden Temple in the centre passes two modern **Sarais** and several small mosques, and finally, through a deep archway in the centre of the municipal buildings, enters the **Kaisarbagh**, where stands a white marble statue of the Queen-Empress Victoria Opposite the statue is the Saragarhi Memorial erected by the Indian Army to the memory of the small detachment of Sikh soldiers who fell, in 1897, defending the fort of Saragarhi on the Samana Ridge, N.W.F., against overwhelming odds [1]

At the entrance to the temple rises the **Clock Tower.** The road E. from the Clock Tower leads to the Jallianwala Bagh, where the troops fired on a crowd in 1919 Martial law had been proclaimed in consequence of rioting and murder, and all assembly prohibited by proclamation Villagers assembled for the Baisakhi festival were induced to attend a political meeting on false pretences

European visitors to the temple remove their shoes and are supplied with clean socks to wear over their own socks or stockings The Sacred Tank is surrounded by a tessellated pavement of white marble 24 ft. broad, with ribs of black and brown, brought from Jaipur It is a square of 510 ft each way The buildings around it are called **Bungahs**, and are the hostels of various persons and village communities who come to worship To the N.W. of the tank is the Takht Akal Sahib (see p 338), with a gilt dome In the N.E. is the white bungah of the Chiefs of Patiala and Nabha, and beyond, to the E., are two pillars called the Ramgarhia Minars A local guide by Sirdar Sundar Singh gives details

The Committee of management, under the Sikh Gurdwaras Act, employs an English-speaking guide who meets visitors at the Clock Tower Rules to be observed are painted on a board near the main entrance — the Darshan (viewpoint) Darwaza. Beneath the arch is a Memorial of the part taken by the 35th Sikhs in the Chitral Expedition (1897) Here shoes must be discarded

The **Golden Temple**, called by Sikhs and Hindus the Darbar Sahib, or the Harmandir, stands in the centre of the tank on a platform approached from the W. side by a white marble causeway 204 ft long, flanked on either side by nine gilded lamps

Except for the lower part of the walls, which are of white marble, the whole of the building is encased in gilded copper, inscribed with verses from the *Granth Sahib*, written very clearly in the Punjabi character It is entered by doorways on three sides, with doors plated with silver finely wrought The walls are richly gilded and painted with representations of flowers, etc. On the E. side is seated the high priest, either reading from a copy of the *Granth Sahib* (the original is kept here) on an ottoman before him, or waving a *chauri* over it, whilst pilgrims throw offerings into a sheet spread in the middle of the floor, and then taking their places around it, sit down and join in chanting verses of the sacred volume to the music of stringed instruments.

On the roof is a small decorated Shish Mahal, or pavilion, with a curved roof in Chinese style The brooms kept to sweep it out are made of peacocks' feathers

[1] See p. 373

Returning to the gateway, which has doors covered with massive silver plates, a staircase will be found to lead up to the **Treasury**. Permission to visit must be obtained from the President, Darbar Sahib Committee This place has thirty-one pillars or poles of silver 9 ft. long and 4½ in in diameter, and four large ones In the chest are kept three gilt maces, a *panka*, two *chauris*, all with gilt handles, a *canopy*, weighing 10 lb. of pure gold, set with emeralds, rubies, and diamonds, a pendant of gold, a coloured plan of the temple, and a magnificent diadem of diamonds with strings of pearl pendants, which used to be worn by Nau Nihal Singh, grandson of Ranjit Singh There is also a sort of gilt arch 6 ft high All these are used when the *Granth* is carried in procession

On the W side of the small square facing the gateway is the **Akal Takht**, with a gilt dome This name is applied to the supreme religious council This temple was built in the time of Arjan, the fifth Guru A low staircase leads to a room with a projecting window. In the room is a gilt ark, and a sword is taken out and shown It is a falchion 4 ft. long and widening towards the end, said to be the sword of Guru Hari Govind , a mace also is shown, which was wielded by one of the Gurus. In the ark are also the vessels for the initiation of new members into the Sikh brotherhood.

The **Temple Garden**, Guru ka Bagh, is on the S side of the enclosure. It is 30 acres in extent, and contains pomegranate, orange, and other fruit-trees, a tank called Kaulsar, and several small pavilions. At the S end of the garden is the **Baba Atal Tower**. The lower room is richly painted with frescoes representing scenes from the life of Guru Nanak. A staircase leads up to seven galleries; there is then a wooden ladder which ascends to an eighth, the entire height of the building is 131 ft

This tower is dedicated to Atal Rai, the younger son of Guru Har Govind, who is said to have been reproved by his father for raising the snake-bitten child of a widow to life, on the ground that supernatural powers ought to be displayed in purity of doctrine and holiness of life, and not in miracles. Thereupon Atal Rai said that as a life was required and he had withheld one, he would yield up his own, and so lay down and died (1628)

Outside the Temple enclosure on the E. are the lofty plain **Ramgarhia Minars** The one to the N may be ascended At the top there is a good view to the N W taking in a white temple to Siva at the extremity of the city, built by Sardar Tej Singh. To the N.E., at 1 m off, **St Paul's Church** is seen peeping out among woods Govindgarh Fort appears to the S W

The return journey may be made by the Rambagh Gate N of the city To the left is the mosque of Muhammad Jan, with three white domes and slender minarets. Farther to the N. is the 'Idgah, and close to it is the mosque of Khan Muhammad. In front of the gate, and just across the railway, are the pretty Rambagh **Public Gardens** which are about 40 acres in extent, enclosed by Ranjit Singh In the centre is a pavilion in which Ranjit Singh used to stay Before entering the gardens the Civil Hospital is passed

The **Fort of Govindgarh** is a short distance to the S.W. of the

city. It was completed by Ranjit Singh in 1809, the fortifications being traced by the French officers in his service Such names as Ronde de l'Est may be seen on the walls

Amritsar is within the Lahore Diocese and at St Paul's Anglican Church in the Civil Station services are held by visiting chaplains from Lahore There is also a Roman Catholic Church. The principal Mission is that conducted by the Church Missionary Society. This Society maintains a High School for Girls and a Hospital The Zenana Bible and Medical Mission maintains the St Catherine's Hospital for Women.

2½ m W of Amritsar station, on the Grand Trunk Road, is the Khalsa College, which was founded in 1882. This is the National College for Sikhs and it is affiliated to the Punjab University in Arts and Science It has a large staff, and accommodates about 700 students, some of whom are residents in the College hostels The Khalsa College was honoured by a visit from His late Majesty King George V, on the 11th December 1905

The other educational institutions in the station are —the Medical College; the Government High School, the Muslim Anglo-Oriental High School, the Hindu Sabha High School; the Pandit Baij Nath High School, the Dayanand Anglo-Vedic High School, and the Government Clerical and Commercial School. There is a Government Hospital under the charge of a Civil Surgeon The Amritsar Municipality also maintains several Dispensaries and Health Welfare Centres, and the Princess of Wales' Hospital, of which the foundation-stone was laid by Lady Chelmsford on the 16th April 1917.

The city is provided with a good water-supply with a sewage-disposal scheme. An Electric Transforming station, in connection with the Uhl River installation, supplies electricity

The principal fairs held are at the Baisakhi festival in April, of Guru Arjan Singh in June, and at the Diwali festival in November. They gradually came to be utilised for the buying and selling of agricultural stock

15 m. to the S. of Amritsar is **Tarn Taran**, (D.B.), a place very holy to the Sikhs, through which a line runs to Patti and Kasur (p. 347)

The **Temple** (Europeans are admitted) and **Tower** are situated on the E side of a magnificent tank, filled with water from the Bari Doab Canal, made by Maharaja Ranjit Singh when he built the temple The lower room of the temple has been handsomely painted with representations of trees, while the outside walls have paintings of gods and goddesses The room has a corridor round it, on the S. side of which is the *Granth*, enveloped in silk wrappers, and fanned by an official with a *chauri*.

The temple was the residence of the Guru Arjan, and is older than Amritsar, it has no writings on the walls There is a small pavilion with open sides on the roof The tank is said to possess miraculous powers to cure any lepers who can swim across it At its N. corner is a tower built by Nau Nihal Singh (p 352)

The neighbourhood is famous as the stronghold of the Manjha

Sikhs, and a former recruiting-ground for their army. It is still heavily recruited for military service There is a leper asylum outside the town, and a suburb inhabited by those infected with the disease, from which it is said the Guru Arjan himself suffered.

34 m. N of Amritsar on the branch to Sialkot (p 361), is the town of **Dera Baba Nanak**, where the celebrated Sikh Guru, Baba Nanak, lived and preached The golden temple here is well worth a visit At 36 m is the Ravi river with a bridge 1495 ft long (1929) The road to Sialkot was finished in 1854.

The railway from Amritsar to Lahore, opened in 1862, crosses the boundary of Pakistan

300 m from Delhi is Moghalpura The railway *workshops* are very extensive

350 m from Delhi *viâ* Ghaziabad, 297 m. *viâ* Bhatinda, 310 m *viâ* Ambala, **LAHORE** junction (Route 16)

Amritsar to Pathankot, for Dalhousie and the Kangra Valley (opened 1884)

At Amritsar passengers for Dalhousie, Chamba, Kangra, and Dharmsala change on to the Amritsar-Pathankot Branch

45 m from Amritsar, on this branch **Gurdaspur** (D B K), headquarters of a district

16 m W from Gurdaspur, and connected by road, is **Kalanaur** (District Board R H.), where is a monument to mark the place where Akbar was proclaimed Emperor The Jhulna Mahal is an arched wall 40 ft. long and 10 ft high which sways under a person sitting on it, like an elephant

10½ m. N.W. of Gurdaspur is the Trimmu Ghat of the Ravi, where Brigadier-General Nicholson with a Punjab Movable Column defeated the Sialkot and Jhelum mutineers (p 361) on 12th July (1857)

67 m **Pathankot** junction (R, D B, and R H) 8 m to the N, on the high bank of the River Ravi, is the picturesque Shahpur Kandi Fort, dating back to the 16th century, with a R H in one of the old towers. The Rajas of Pathan often rebelled against the Mughal Emperors. Driven back in the hills, they settled at Nurpur, but still retained the clan name Pathanias From Pathankot motor-cars and lorries proceed direct to **Dalhousie**, 52 m, or the journey can be broken at Dunera, 28 m, where there is a D B. Motor service(s) also from **Pathankot** to Palampur, 78 m, for Kulu, *viâ* Guggal, and from Guggal to Dharmsala Cant.

A narrow-gauge ry, 102 m, which involved some difficult work, runs through the Kangra Valley from Pathankot to Jogindarnagar in the Mandi State and was opened for traffic at the end of 1928 At 53 m is the Dhundni tunnel, 250 ft long, the pilgrim track between Kangra and Jawala Mukhi winds along the hillside here, about 200 ft. above the ry track At 57 m. is the Daulatpur tunnel, 1000 ft in length At 59 m. is **Kangra** stn, which is separated from the town (p 342) by a gigantic cleft in the hills, and just beyond is the bridge over the Reond Khad river, consisting of one steel arch of 180 ft. The **Kangra Valley** possesses three important centres of Hindu pilgrimage in Jawala Mukhi, Kangra and Baijnath and

large *melas* are held at these places and also at Palampur (p 342) and Dharmsala. The Mandi State covers an area of 1139 sq. m The Raja, Capt. H H Sir Jogindar Sen Bahadur, was born in 1904 and succeeded in 1913. Mandi City (D B K) is 35 m. from Jogindarnagar. The Hydro-Electric Scheme, with headworks in the Uhl river valley, is intended to supply power to towns in N India, including Delhi and Simla The power station is at Jogindarnagar

Dalhousie (D B K), alt 6678 ft, is a hill station and sanatorium, with a Cantonment at Bakloh (5500 ft) and military locations at Ticca Spur, Mankot, and Banikhet

From Dalhousie a visit may be paid to **Chamba** (D B), the capital of a Hill State which covers an area of 3216 sq m H H Raja Lakhsman Singh, who was born in 1924 and succeeded in 1935, belongs to one of the most ancient Rajput houses The scenery is very fine, especially between Dalhousie and Chamba (20 m distant across the Ravi), where the summer road passes at an average height of 8100 ft for 6 m through one of the most beautiful forests in the world At 11 m from Dalhousie, 9 m. from Chamba, is the "Marg," or green open space of the hamlet of Khajiar (6400 ft, D B. and R.H.), a circle of green sward having a perimeter of 1 m, with a lake in the middle, in the midst of cedar forests, under the slopes of Dain Kund (9160 ft), from the summit of which a semi-circle of snow-capped heights is to be seen. The lower or winter road is 21 m (Chil, 12 m., and 9 m to Chamba, no motor service.)

The Chamba State, which comprises the Upper Ravi and part of the Chenab Valley, is very rich in ancient remains. It was under Sikh rule (1810-46). Chamba is a most Italian-looking town, on a plateau about 400 ft. above the river, with old temples, well worth seeing, it is lit by electricity, with electric fans in all public buildings. An interesting collection of antiquities is on view in the State Museum, founded by the Raja Sir Bhuri Singh in 1908 and named after him (*Illustrated Catalogue*, by Dr Vogel, Calcutta, 1909) On the N end of the *Maidan* (here called Chaugan) is the hospital named after Raja Sham Singh (died 1904 A D.), and on the other end the Residency used for the accommodation of distinguished visitors. Opposite the Museum are the Presbyterian Church and the Mission House of the Church of Scotland Mission

Chamba, being situated in the Ravi Valley, is very hot during June-August

From Chamba roads branch off to Kashmir, to Pangi (over the Sach Pass), to Brahmaur, and on to Chamba Lahoul, and Kulu Lahoul. There are D.Bs at Khajiar (closed for some months in the winter) and at Chamba Travellers desiring information should apply to the Chamba State Vakil, Dalhousie, or to the Assistant-Commissioner, Dalhousie

Dharmsala (D B K), alt 7135 ft, founded 1855, headquarters of the Kangra District, is reached (56 m.) by a motor road from Kangra At Nurpur [1] (ancient fort, with ruined temple), Kotla (29 m.), and Shahpur (40 m), there are D Bs The new Civil Station of Dharmsala, erected since the earthquake of 1905 on the site of the old Cantonment, at a height of about 4500 ft., is

[1] On the temple in Nurpur fort, see *Arch Survey, Ann Rep*, 1904-5, pp 110-120

reached at 56 m Thence the motor road leads to the upper station and Gurkha Cantonment (1906), which lies at an elevation of about 5500 ft. This is in the midst of fine forest trees, and overshadowed by the great rock wall of the Dhaula Dhar, which rises to 16,000 ft Above this, at Dharmkot (about 7000 ft.), are the summer quarters of the American United Presbyterian Mission. In the centre of the upper station is the rebuilt Church of St John in the Wilderness, which, with the entire station, was destroyed in the earthquake of 1905 In the churchyard is the tomb of the eighth Earl of Elgin and Kincardine, Viceroy 1862-3, who died here while on tour It was very badly damaged in the earthquake, but has since been restored

Above the upper station one of the main spurs of the Himalayas rises steeply to a height of 16,000 ft to 17,000 ft The great granite mountains appear almost to overhang the station, while the view S E , S., and S W , over the Kangra Valley and the Sewaliks and intervening foot-hills, is one of extreme beauty The River Bias, which is renowned for its mahseer fishing, can be seen when the atmosphere is clear.

Kangra (D B K , alt. 2500 ft), anciently known as Nagarkot or Bhawan, occupies a hill overlooking the Banganga torrent The name Kangra properly belongs to the ancient Rajput fort, which crowns a precipitous rock, rising sheer above the Banganga, and dominates the whole surrounding valley The temple of Devi Vajresri, on the N., and the fort were destroyed in the 1905 earthquake the temple has been rebuilt This temple is mentioned in Ferishta's account of the fourth invasion of India by Sultan Mahmud, A.D. 1008, who sacked it, and again, in A.D 1360, it was plundered by the Emperor Firoz Tughlaq. The headquarters of the District were removed from Kangra to Dharmsala in 1855

28 m E of Kangra is **Palampur**, centre of the Kangra tea plantations. 90 m E. again are the interesting temples of **Baijnath**, with two inscriptions in the Savada character, giving the date A D 1204, and a statue of the Jain Mahavira

On the road to Sultanpur, 21 m S.E of Kangra, is the famous temple of **Jawala-Mukhi**, picturesquely built up against a rocky cliff, from a cleft in which an inflammable gas issues This is one of the most popular Hindu shrines in N India, and the autumn fair is largely attended The Punjab Government have purchased a large estate at Palampur for the purpose of establishing a health resort , and Baijnath is likely to be similarly developed March and April are the best months for the Kangra Valley

Sultanpur (D B K), known as Kulu or Kulu shahr ("city of Kulu"), is the principal village in the Kulu Valley, the upper part of the Bias Valley up to the Rohtang Pass The Chiefs, of whom the Rai of Rupi is the representative, had their residence here before the country was acquired (1839) by the Sikhs, from whom the British Government took it over It is approached either from Simla (p 325) or from Palampur The journey from Simla is a long and tedious expedition, entailing a trying descent from Narkanda on the Simla-Tibet road into the Sutlej Valley,

and a stiff climb over the Jalori Pass (10,570 ft.) The marches from Simla to Sultanpur will be found on p. 329

At Sultanpur is the temple of Raghunath (another name for Ram Chandar), which was built by Raja Jagat Singh of Kulu, who was a contemporary of Aurangzeb. On the occasion of the Dasahra festival (see p lvii) all the idols of the valley are brought to Sultanpur to do homage to Raghunath

Nagar, the headquarters of the Subdivisional Officer of Kulu, is 13½ m N of Sultanpur.

The route from Palahpur to Sultanpur is shown in table below

The road from Luhri to Jibhi has been re-aligned, and passes through Ani, a settlement of the Salvation Army, where various industries, agricultural and others, are taught by the resident officers This road crosses the Jalori Pass at a slightly lower level than the present road. The pass is closed by snow for three months in the year

In winter the Bhubu Pass is closed by snow, and the road to Kulu lies over the Dulchi Pass (7000 ft). This road leaves the Dhelu-Jhatingri mule track not far from Jhatingri, and passes through Hurla, Drang, and Kataula, all in Mandi State, and, crossing the Dulchi Pass, drops on to the Simla-Kulu road at Bajaura.

There is good small-game shooting[1] in Kulu in the winter, and the country holds bear (red and black), ibex, *burrhel*, *thar*, and *ghoral*. Leopards are numerous These and black bear are regarded as vermin, and a reward is given for each one destroyed To shoot big game, other than vermin, a licence, costing Rs.20, must be procured The number of licences is strictly limited, as is also the number of head that may be shot by a licence-holder. Licences are issued by the Divisional Forest Officer, Kulu, they cover the whole of Kulu, Saráj, Lahaul, Spiti and Bara Bangáhal. There is often difficulty in getting labour and supplies, travellers and sportsmen should give ample notice of their visit to the Assistant-Commissioner, Kulu, who will send them detailed information regarding supplies, prices, rates of coolie hire, etc Much trouble is saved by travelling with mules to carry luggage, and on no account should travellers who have entered the country with mules dismiss them there, unless they are making

[1] See Colonel Tyacke's *Sportsman's Manual in Kulu, Lahaul, and Spiti* A booklet of information for travellers, containing the latest rules and hints regarding travelling, may be obtained from the *Civil and Military Gazette* Office, Lahore

From	To	Accommodation	Country	Distance
				Miles
Palampur	Baijnath	Good bungalow Kangra District.	Undulating.	9
Baijnath	Dhelu	In Mandi State. Bad bungalow.	Dreary.	13
Dhelu	Jhatingri.	In Mandi State Good bungalow.	Flat and then rapid ascent	14
Jhatingri	Badwani	Small Bungalow.	Cross valley.	13
Badwani	Karaun	In Kulu Small bungalow	Cross valley and then cross Bhubu Pass (9480 ft).	12
Karaun .	Sultanpur	In Kulu.	Steep descent.	8

a long stay. The Kulu Valley is famous for its fruit orchards, where the finest apples and pears are grown for export to the plains of India and as far as Aden, Ceylon and Burma An effort made to stock the Kulu streams with trout has been successful A hatchery has been established at Nagar, and the trout now breed wild in the Bias Fishing is good Licences are issued by the Assistant-Commissioner, Kulu, for Rs 20 per month, and Rs 50 for the season Dry-fly fishing is, however, practically impossible during the rains when the river is muddy.

(c) Delhi to Lahore by Bhatinda and Ferozepore.

The Southern Punjab (broad-gauge) section of the N W Ry was opened in 1897 to Bhatinda

44 m **Rohtak** jn (D B K), headquarters of a District (1824), was a border town between the Sikh and Maratha powers and fell into the hands of various chieftains Muslin turbans interwoven with golden and silver thread are made here Branch line to Panipat jn (p 320)

79 m. from Delhi, **Jind**, junction for a branch, 44 m to Panipat (p 320) Although Jind gives its name to the Sikh State, the capital is at Sangrur (see p. 335).

100 m **Narwana**, junction, 54 m. to Kurukshetra (p 322)

124 m **Jakhal**, junction for the broad-gauge line running, 131 m, from Hissar to Ludhiana (p 334)

185 m. **Bhatinda** junction (old name, Bikramgarh). Broad-gauge lines E to Patiala, Rajpura, and Ambala, W. to Samasata (Bahawalpur), Hyderabad (Sind), and Karachi Metre-gauge lines run S. to Bikaner and also to Hissar and Rewari (p 225). There is a fort, Govindgarh, built by Sher Shah with walls 118 ft high, seen from the railway, but the town contains only the shrine of Baha Ratan, a Muslim saint, who is said to have been a Hindu converted to Islam in the reign of Shahab-ud-din Ghori (*c.* 1200 A D.), and yet is believed to have lived in the days of the Prophet

On the line (metre-gauge), 187 m S to Rewari, are the following stations :—

47 m **Sirsa** station (D.B.K.), said to have been founded by Raja Saras about the middle of the sixth century It was formerly well known as Sarasvati. The ruins of old Sirsa lie to the S W A great cattle fair is held here in August and September, at which 30,000 head of cattle are offered for sale

98 m **Hissar** station (R, D.B), junction of the N W R, Bikaner R and B B C I R A branch of the *W Jumna Canal*, made by the Emperor Firoz Shah Tughlaq to irrigate his hunting-seat at this place, was restored by the British in 1826 Here local levies revolted during the Mutiny of 1857, and murdered the Collector and twelve Christians, to whom a monument is erected beside the little Church, but before Delhi was taken a body of Sikh levies, aided by contingents from Patiala and Bikaner, under General Van Cortlandt, had restored order

The city and the fort on the W. side of it were founded in 1354 A.D. by the Emperor Firoz Shah, who made it his favourite hunting-seat. Lying on the main track from Multan to Delhi, it became a place of importance, of which there are

only buried remains now besides the old walls and gates. Within the limits of the original fort are the ruins of a Muslim building, the Gujari Mahal, constructed of Jain remains, and in the present citadel enclosure are the Emperor Firoz Shah's Lat and Mosque, and remains of an old palace

E. of the city is a fine stone building called the Jahaz, or Ship, from its shape It was used as a workshop of the W. Jumna Canal, but is now a protected monument A large cattle fair is held at Hissar twice a year Hariana cattle are exported largely to Calcutta S and W of the city there is a Government cattle-farm (*Bir*), managed by a European Superintendent, with an estate of 60 sq miles for pasturage

The *District of Hissar* borders on the Rajputana Desert, and the average rainfall being only 10 in, the country is subject to famines In 1939 the cattle were in danger of extinction The *Ghaggar*, with scant verdure along its banks, winds through the N of the district

113 m. **Hansi** station (D B), on the W Jumna Canal, founded in the eighth century by Anangpal Tomar, King of Delhi, and long the capital of Hariana There are ruins of an ancient citadel and some remains of gateways, and a high brick wall, with bastions and loopholes In 1798 the famous sailor-adventurer, George Thomas, fixed his headquarters at Hansi, but was driven out in 1802. In 1803 British rule was established The famous Colonel Skinner (p 290) died here in 1841

At **Tosham** (D B), 23 m. S.W., are some ancient inscriptions. They are cut in the rock half the way up the hill near a tank much visited by pilgrims who come from great distances to the yearly fair there Tosham is about 9 m from Bawani Khera Ry Stn, which is 17 m from

135 m **Bhiwani** station (R H), formerly a great market for all North Rajputana

On the main line to Lahore, 211 m from Delhi is **Kotkapura** (R.), in Faridkot State. Junction for a metre-gauge line, which runs 50 m W from Kotkapura to Fazilka junction The town has a considerable trade in grain, and a fine market known as the "Bikram" Mandi

219 m from Delhi is **Faridkot** town (R H), capital of the Sikh State of that name The Chief is of the same tribe, but of a different Jat family from those of the Phulkian States (p. 332). Chaudhri Kapura founded the Faridkot house in the middle of the 16th century, and his grandson, Sardar Hamir Sing, became independent a century later, having added considerably to the family possessions. Maharaja Ranjit Singh took possession of the State in 1809, but agreed to relinquish it by the Treaty of Amritsar For services rendered during the first Sikh war the Faridkot Chief received the title of Raja and a grant of territory The State, with an area of 638 sq. m., is under the political control of the Agent to the Governor-General, Punjab States The State maintains an excellent Company of Sappers and Miners for Imperial Service The present Chief, Lieut. H H Raja Har Indar Singh Bahadur, was born in 1915 and succeeded in 1918 The town, which lies 20 m S of Ferozepore, contains the residence of the Raja and public offices of the State It has a considerable trade in

grain. The chief places of interest are—a fort built about 700 years ago by Raja Mokulsi, a Rajput, in the time of Bawa Farid-ud-din, a saint, who gave it his name, and the Davies Model Agricultural Farm and farmer's house

239 m from Delhi is **Ferozepore** Cantonment junction (R., D B.), lying midway between the Cantonment proper and the City. The fort is 1 m W of Cant. Stn

The city was founded in the time of Firoz Shah of Delhi, 1351-1387 A.D. When it lapsed from the Sikhs to the British in 1835 it was in a declining state, but through the exertions of Sir Henry Lawrence and his successors it has increased to its present importance as a market of raw produce, much of which is due to the Sirhind Canal, extended to the District in 1882, and the Grey inundation canals along the Sutlej, inaugurated by Colonel Grey, C S I., in the years 1874-8 The main streets are wide and well paved, while a circular road which girdles the wall is lined by the gardens of wealthy residents.

A memorial was erected in 1933 to the Sikh garrison of Saragarhi on the Orakzai Samana range (p 373), which fell to a man defending the post in 1897.

At Ferozepore the Governor-General, Lord Auckland, met Maharaja Ranjit Singh in December 1838, only six months before his death, to make arrangements for the advance of the British army on Kabul, and four years later Lord Ellenborough received the "victorious army" on its return, General Sale and the "Illustrious" Jalalabad garrison crossing the bridge over the Sutlej at the head of the force

On the 10th of December 1845 the Sikhs invaded the District, but were driven back across the Sutlej During the Mutiny of 1857 one sepoy regiment revolted, the other was disarmed.

The *Fort* was rebuilt in 1858 and greatly strengthened in 1887 The ry passes between the City and the Fort, and the Grand Trunk Road between the Fort and the Cantonment

The *Memorial Church*, in honour of those who fell in the Sutlej campaign of 1845-6, was destroyed in the Mutiny, but was subsequently restored. In the cemetery on the Grand Trunk Road to Ludhiana lie many distinguished soldiers, amongst them Major George Broadfoot, C B., Governor-General's Agent, N W. Frontier, General Sale, and General Dick

The three great battlefields of the First Sikh War, fought by Sir Hugh Gough, can be visited from this point **Mudki** (18th December 1845) lies 17 m to the S E., **Ferozeshah** (21st and 22nd December), 11 m. E., and on the railway to Ludhiana and 8 m from Mudki, and **Sobraon** (10th February 1846) 22 m N E Mudki and Ferozeshah are accessible by motor to within 1½ m and ½ m respectively To reach Sobraon requires a 5 m ride across country from Mallanwala Khas Stn on the Jullundur line

The Sikhs entered British territory at the Harike Ford, near Sobraon, and in this last battle they lost 10,000 men killed or drowned The losses of the British in killed and wounded in these battles,[1] in which they met

[1] See *The Sikhs and the Sikh Wars*, by General Sir H Gough, V.C., and A D. Innes, also *Life and Campaigns of Hugh, 1st Viscount Gough, Field-Marshal*, by R. S Rait.

in the Sikhs foemen worthy of their steel, were heavy—viz., at Mudki, 872 killed and wounded; at Ferozeshah (where the troops failed in the first attack on the entrenchments, which were carried the next day), 2415, and at Sobraon, 2299. Generals Sale and M'Caskill were killed at Mudki, Major Broadfoot at Ferozeshah, and General Dick at Sobraon. The Governor-General, Sir Henry Hardinge, was present at the battles of Mudki and Ferozeshah. A plain obelisk has been erected on each of the battlefields.

Beyond Ferozepore the railway crosses the Sutlej River by the Kaisar-i-Hind bridge—4293 ft. long as constructed in 1887, but reduced to 1965 ft. (1928). It carries a road also. Below are the headworks (opened in Oct. 1927) of the second unit of the Sutlej Valley Irrigation Project, from which the Bikaner Gang Canal (p. 215) flows. The headworks of the first unit are at Suleimanke (56 m.), and other headworks are at Islam (138 m.) and Panjnad, farther down the river. The canals utilize the surplus water of the Sirhind Canal (p. 334).

Boundary of Pakistan.

256 m. **Kasur**, an old Pathan stronghold. Jn. for a line on the N. to Patti, Tarn Taran, and Amritsar (p. 336). Another line runs to Lodhran (p. 396).

272 m. **Raiwind**, junction for the broad-gauge line S.W. from Lahore to Karachi (Route 19).

297 m. **LAHORE** Junction station (R. good). Lines run N. to Rawal Pindi and Peshawar (Route 17).

ROUTE 16.—LAHORE.

Map faces p. 358

LAHORE* (alt. 705 ft.) is capital of the West Punjab Government, the seat of an Episcopal See (1877), and headquarters of a District (pop. 671,659 in 1941).

If only a few hours can be devoted to Lahore,[1] a selection of the objects of greatest interest may be made from the following route (the Mosque of Wazir Khan, the Fort, and the Badshahi Mosque should be seen in any case). Drive to the Queen's Jubilee Statue at five cross-roads (Charing Cross), and E. along the **Mall**, passing (in this order), right, the **Masonic Lodge**, a fine edifice at the entrance to the **Lawrence Gardens**, left, **Nedou's Hotel**; right, the combined ***Lawrence* and *Montgomery* Halls**, left, **Government House**, the residence of the Governor of the Punjab, left, the **Punjab Club** and **Aitchison** or **Chiefs' College**, 3 m. farther on is Mian Mir (Lahore Cantonment), beyond the Upper Bari Doab Canal (1859) which irrigates 27,000 square miles.

The route along the Mall West from Charing Cross passes: left, **Faletti's Hotel**, **Cecil**, **R.C. Cathedral**, **Lord Lawrence's Statue**; right, the **Anglican Cathedral**; left, the **High Court** and the Accountant General's Office; several **Banks**, and then, right, the **Telegraph Office**; and left, the **Post Office**. Near a slight turn in the road, on the left, are the **Market**, the **Central Museum**, the **Jubilee Institute** and the **Mayo School of Art**, and the **Town Hall**, and beyond, the entrance to the **Anarkali Gardens**; the tomb of Anarkali and the principal Punjab

[1] Thornton's *Lahore* and Syad Muhammad Latif's *Lahore* (1892) give very full accounts of the place.

Government Offices lie to the S.W. of these, the rest of the offices and the Senate Hall of the University being opposite to the Museum. Turning N along the Lower Mall the **Government College** is passed, right, left, **Deputy-Commissioner's Court and Government School**. Farther E is the **King Edward Memorial Hospital** Proceeding round the W side of the city the **Cemetery** is passed left, and a little farther on the road divides — that left leading to **Shahdara** (p 359) across the Ravi river bridge, and that right passing the Badshahi Mosque, the **Fort**, Wazir Khan's Mosque, by a circular road round the N of the city, to the railway station

In the new Public **Buildings** of Lahore an attempt has been made to adapt Hindu and Muslim styles to modern requirements Success has been largely due to the late Mr J. L. Kipling, C I E, Sir Ganga Ram, C I E, M V O, the late Sardar Bahadur Bhai Ram Singh, M V O, and Mr Basil Sullivan, F.R I B A

History.—In A.D 1013 Lahore, then called Panchalnagar, was in the hands of a Brahman King of Kabul, from whom it was wrested by Mahmud of Ghazni, whose famous slave, Malik Ayaz, was Governor here It was conquered by Shahab-ud-din Ghori in 1184, but did not, however, attain to magnificence till the rule of the Mughals Akbar held his court here at times (1584 to 1598), enlarged the fort and surrounded the town with a wall (which has been demolished). Jahangir often resided at Lahore, and during his reign Arjan Dev, Guru of the Sikhs, compiler of the *Adi Granth*, died in prison here. Shah Jahan built the palace of Lahore, and Aurangzeb built the great mosque, but in his time the city began to decline, and was much ruined from 1747 onwards by Ahmad Shah Durani. Of its glory in its prime the proverb ran : "Isfahan and Shiraz united would not equal the half of Lahore." Vigorous Muslim governors, Abdul Samand Khan, Zakaria Khan (1717-38), Yahia Khan (1738-1748), the son of the latter, and nephew of the Delhi Wazir Kamar-ud-din Khan, and Mir Mannu, son of Yahia (1748-52), maintained themselves in the Punjab, and fought with the Sikhs, but submitted to the Persians under Nadir Shah, and to the Afghans under Ahmad Shah When the widow of Mir Mannu, Murad Begam, was treacherously entrapped by the Wazir Ghazi-ud-din, Adina Beg (1755-8) was made Governor of the Province, and it was his summoning the Mahrattas to protect him against the Sikhs that led in 1761 to the Battle of Panipat

From 1775 the Sikhs were the real rulers. Under Ranjit Singh (1799), Lahore revived, but under British rule, since 1849, buildings have greatly multiplied The Circular road runs round the city, to which it gives access by thirteen gates

Lahore is lit by electricity generated on the Uhl river, 180 miles distant (p 341) An Improvement Committee was formed in 1936 There is a Northern India Chamber of Commerce

In the N W corner is the citadel The city moat has been filled in and has been converted into lawns. The **Ravi** River, flowing W, once washed the walls of the city, and in 1662 made such encroachments as to necessitate the construction of a massive embankment 4 m long, but now passes at about 1 m. W. of the city.

At Charing Cross a Legislative Chamber (1938) initiated a Government Centre

The Mall—E of Charing Cross

The **Lawrence Gardens** contain varieties of trees and shrubs such as the *Pinus longifolia*, the Australian gum-tree, and the carob-tree of Syria, also a Zoo and a cricket ground

At the N side fronting the **Mall** is the **Lawrence Hall**, built in memory of Sir John Lawrence in 1862 The **Montgomery Hall**, built in 1866 in memory of Sir Robert Montgomery (Lawrence's successor as Lieutenant-Governor), faces the central avenue of the gardens The Montgomery Hall contains portraits of Sir Henry Lawrence, Sir John Lawrence, and other Lieutenant-Governors of the Province, and celebrated Englishmen, including Brigadier-General John Nicholson

Government House stands on the opposite side of the Mall, N. of the Lawrence Gardens. It was the tomb of Muhammad Kasim Khan, cousin of the Emperor Akbar. He was a great patron of wrestlers, and his tomb used to be called *Kushtiwala Gumbaz*, or Wrestler's Dome. The Governor is Sir Francis Mudie, K C S I , K.C I.E (1947)

E of this is the **Punjab Club**, and E. again the **Aitchison** or **Chiefs' College**, which owes its inception to Sir C U. Aitchison (Lieutenant-Governor, 1882-7), and of which the foundation-stone was laid by Lord Dufferin in 1888 It is intended for the education of the sons of the Princes and leading Chiefs of the Punjab

The Mall—W. of Charing Cross

The **Jubilee Statue of Queen Victoria** stands at Charing Cross The **R.C. Cathedral** is a very fine building, the **Anglican Cathedral** designed by Sir Gilbert Scott, was erected 1884-87. Beyond is a statue of Lord Lawrence, Chief-Commissioner and, later, Lieutenant-Governor, 1853-59. Robert Cust, Deputy-Commissioner of the Kangra Valley in 1848, and not John Lawrence, was the author of the pen and sword phrase, which the sculptor Sir J E Boehm inscribed on the base of the statue, and which has now been modified in deference to Indian susceptibility The **High Court** building is in the late Pathan style of the 14th century The Telegraph Office, the Post Office, and the Imperial Bank are all handsome buildings Adjoining the last is the American Presbyterian College

The foundation-stone of the **Central Museum** was laid by H.R H the Duke of Clarence in 1890 Opened 1894, it contains antique sculptures, coins, Kangra and Mughal paintings, the arts and crafts of the Province, textile manufactures and some raw products The Græco-Buddhist sculptures were excavated from sites in the Peshawar district and surrounding territories, the ancient Gandhára country These were largely the work of Græco-Bactrian sculptors, and show a very strong Hellenistic influence, for example, in Corinthian capitals from Jamalgiri [1] The subjects are purely Indian, the bas-reliefs illustrating scenes of Buddha's life The Buddha image itself is, in all probability, a creation of the

[1] The standard work on these sculptures is A Foucher's *Art grèco bouddhique du Gandhára*, vol i, Paris, 1905

artists of Gandhára. The flourishing period of the Græco-Buddhist school is believed by the best authorities to fall in the 1st century A.D., though the most classical specimens are probably earlier. A *stúpa* drum of Sikri occupies the centre of the archæological gallery. It is carved all round with various scenes of Buddha's life, including that of his being fed by a monkey. The Sikri sculptures were excavated by the late Sir Harold Deane, the first Chief Commissioner of the Frontier Province The statue of Gautama Buddha emaciated after his long fast, is striking Among inscriptions may be seen that of Takht-i-Bahai, dated in the reign of King Gondophares, at whose court St Thomas, the Apostle of India, is believed to have lived (A.D 40), and who, according to tradition, put the Apostle to death

In the archæological department[1] the bases of two pillars brought by General Cunningham from Shah ki Dheri, probably the ancient Taxila, numerous Buddhist sculptures from the Yusafzai country and elsewhere, in which the classical influence is plainly discerned, a Buddhist pillar about 9 ft high, with a huge head projecting on one side, dug up near Jhelum; also two old brass cannon found buried in a mound of Anandpur, in the District of Hoshiarpur, thought to be of the time of Guru Govind Singh Two relics of the prehistoric age—finely finished celts of porphyritic greenstone—were found in Swat.

The collection of jewellery, both antique and modern, includes specimens from the Trans-Indus territory, reproduced by Sir J. H. Marshall in his Report for 1902-3 (pp 185-94) A collection of hookahs of all periods and in all materials is contained in another interesting case. There is also a comprehensive collection of musical instruments made by the late Mr Lockwood Kipling, and a good collection of Indian arms and armour, among which a dagger fancifully decorated with pearls running in grooves in the blade, and a sword, the hilt and scabbard of which are decorated with Niello work, are particularly noticeable Other cases contain specimens of pottery and Punjab glass, and of the *Kofigari* work of Gujarat and Sialkot; cups and ornaments of vitreous enamel from Bahawalpur, silver inlaid in pewter and perforated metalwork from Delhi.

There are specimens of the silk manufactures of Bahawalpur and Multan, and satinettes. The embroideries called *shishadar phulkaris*, of soft floss silk on cotton, interspersed among which are small bits of glass, are special to the Punjab; the rude idols, hideously painted, were worshipped by the ladies of the Sikh Court. There are choice examples of Kashmir shawls, both woven and hand-embroidered, and some in which the two processes are combined, and specimens of that interesting process called "tie-dyeing," showing the method of manufacture. Miniature model groups show workers engaged in making pottery, glass, metal ware, lacquer work, turning, etc There are also collections of the leathern ware of the Punjab; of ethnographical heads by Messrs Schlagentweit; lay figures habited in the costumes of the people of Lahaul, Spiti, and Ladakh; and Tibetan curiosities, such as prayer-wheels.

In the mineral section will be seen a model of the *Koh-i-Nur* made for the London Exhibition

[1] See *Descriptive Guide to the Department of Archæology and Antiquities, Lahore Museum*, by Percy Brown Illustrated Lahore, 1908. 8 as An illustrated catalogue of the Græco-Buddhist (or Gandhára) sculptures by Mr H Hargreaves is on sale for 8 annas

of 1851. According to the Hindus, this diamond belonged to Karna, King of Anga, and according to the Persians, it and its sister diamond, the Darya-i-Nur, or "Sea of Light," were worn by Afrasiab

The numismatic section, which is almost unique for the period of Greek rule in Bactria and the Punjab, and contains also Mughal and Indian coins of great interest, can be seen on application to the Curator The coin catalogue is by Mr R. B Whitehead, I C S, Clarendon Press, 1914.

The Tibetan collection includes some remarkable specimens of Lamaistic temple banners Finest among them is the embroidered banner, showing Padma-sambhava (Lotus - born), who converted Tibet to Buddhism One of the painted banners depicts the "Wheel of Existence" and other scenes of Buddha's life from his conception and birth till his Nirvana and the worship of his relics

Among minor antiquities should be noted a Buddha statuette of brass inlaid with silver and copper from Fatehpur, in the Kangra District. It belongs to the 6th century A.D (see *Archæol Survey, Ann. Rep.*, 1904-5, pp 107-9)

Among the specimens of the mineral resources of the country will be seen iron ore from Bajaur It is a magnetic oxide of singular purity Antimony and lead are also shown, and gold found in the sands of the Punjab rivers in small quantities, with specimens of rock-salt of two kinds—one from the hills between the Jhelum and the Indus, and the other from the hills beyond the Indus

Opposite the Museum is the University Hall and University Laboratory, and in front of the latter is the famous "Kim's" gun, called the Zamzama, "Hummer," or Lion's Roar. The Sikhs called it the Bhangianwali Top—that is, the cannon of the Bhangi confederacy. The gun was made by Shah Wali Khan, Wazir of Ahmad Shah Durani, and was used by him at the Battle of Panipat. After Ahmad Shah left India it came into the hands of the Bhangi Misl, and Maharaja Ranjit Singh eventually got possession of it, and used it at the siege of Multan in 1818, when it was damaged It was then placed at the Delhi Gate of Lahore until 1860, when it was removed to its present site Persian inscriptions give the date of casting, A D 1760

The Mayo School of Arts attained considerable eminence under the late Mr J Lockwood Kipling, C.I E, Mr Percy Brown, and the late Sardar Bahadur Ram Singh, M V.O. The School has always been a centre of craftwork in the Punjab. Mr Lionel Heath expanded the school by direct dealing with small craftsmen

W. of the Museum is the **Town Hall**, opened by H R H the late Duke of Clarence in 1890, and S. of this is the **Punjab Public Library**, said by some to have been built by Wazir Khan, by others by Ilahi Bakhsh It has four white cupolas, and contains many valuable books One wing is a memorial to Sir Muhammad Iqbal, poet and philosopher

Not far off, on the E outskirts of the Anar Kali Bazar, is the Nila Gumbaz, or Blue Dome, the tomb of Abdul Razak, a saint of the time of Humayun Farther S, near the Presbyterian church, is the shrine of another Muslim saint. Over the door is a Persian inscription which says it is the tomb of Saiyad Muhammad Shah Mauj-i-Darya, son of Nuru'llah, who was a spiritual guide in the time of Akbar.

The Tomb of Anar Kali, Pomegranate Blossom (a name given to a favourite lady in the harem of Akbar, who was also called Nadira Begam, or Sharfunnissa), is an octagon cased in plaster and surmounted by a dome. It was once occupied by the heir-apparent of Ranjit Singh · later it was given to General Reuben Ventura, an Italian officer of Jewish extraction in the Sikh army, who removed later on to the adjoining house, now the Secretariat, and used the tomb as his zenana. After the annexation of the Punjab the tomb was converted into the church of the Civil Station (St James), but it is now used as the Historical Record Room This is a model of its kind and should be visited (apply to the Keeper of the Records). Many interesting documents are on view.

The cenotaph, now at the E end of the central chamber, is of *white marble, and the ninety-nine* names of God are exquisitely carved. On the side, below the names, is written *Majnun Salim-i-Akbar* (the enamoured Salim, son of Akbar), Salim being the name of Jahangir On the W side is a date, above the words "In Lahore," corresponding to 1615, which is probably the date of the building of the tomb The story is that Anar Kali was beloved by Salim, and was seen by Akbar, his father, to smile when the Prince entered the harem As a punishment for this it is said that she was buried alive, and the pathetic distich engraved on her sarcophagus certainly indicates that Salim was her lover :—

"Ah gar man baz binam rue yar-i-khwesh ra
Ta kiamat shukar goyam Kardagari, khwesh ra"

"Ah, if I could again see the face of my beloved,
To the day of judgment I would give thanks to my Creator"

In front of the Civil Secretariat Office, adjoining the tomb, is a cross to the memory of Sir Donald M'Leod, Lieutenant-Governor, 1865-70.

The grave of General Allard's daughter is in the Kuri Bagh, garden of the Maharaja of Kapurthala

The **Government College** buildings are on the right side of the Lower Mall, opposite the District Courts Farther back to the W from here is the noted shrine of **Data Ganj Bakhsh**, a saint of the time of Mahmud of Ghazni Next, a view is obtained of the great mosque, and the fort rising above it The **Badshahi Masjid** (which contains relics, including a hair of Muhammad) was built by Aurangzeb. N. of the mosque are Sikh shrines

The first shrine is that of **Guru Arjan**, the fifth Guru, and compiler of the *Adi* (original) *Granth*. The *Granth* is read here daily in a huge volume over which attendants reverently wave *chauris* According to Sikh legend, he disappeared in the Ravi on this spot, upon which Maharaja Ranjit Singh accordingly built this memorial.

The **Samadh** covers the ashes of Maharajas Ranjit Singh, Kharak Singh, and Nau Nihal Singh, grandson of Ranjit Singh It faces the E wall of the fort, and is a square stucco building, restored in part in 1840, on a high platform of marble The ceilings are decorated with traceries in stucco inlaid with mirrors The arches of the interior are of marble, strengthened with brick and *chunam*, and clamped with iron, by order of Sir D M'Leod when Lieutenant-Governor In the centre is a raised platform of marble, on which is a lotus flower carved in marble, surrounded by eleven smaller flowers. The central flower covers the ashes of Ranjit

Singh (*d.* 1839), the others those of four wives and seven concubines who became *satis*.

In the centre of the **Hazuribagh** is the **Barahdari**, a marble pavilion built by Ranjit Singh from the spoils of Mughal edifices. Its historical associations render it of special interest. It is frequently mentioned by European travellers who visited Lahore during the Sikh period. William Moorcroft, the explorer, was lodged here in May 1820, in the reign of Ranjit Singh, and Captain Leopold von Orlich was received in audience by Sher Singh in January 1843.

The **Hazuribagh Darwaza** of the Lahore Fort,[1] is sometimes called the Akbari Darwaza, the Gate of Akbar, but the present gate is a late structure, apparently built at the same time as the *Badshahi Masjid*, and renewed by the Sikhs.

The Hazuribagh Darwaza and the Masti Darwaza (the other main gate which gave access to the fort from the side of the city) have been closed since the British occupation.[2] The fort is now entered through a modern postern dating from the year 1853, where a register of visitors is kept. Behind it rises the Hathi Pol, or Elephant Gate, which once formed the private entrance to the apartments occupied by the Emperor and his ladies.

The gate is gorgeously decorated with tile mosaics, continued all along the W. and N. faces of the fort wall.[1] Though this tile-work has suffered irreparable damage owing to neglect and the repeated bombardments during the Sikh period, it still retains its brilliancy of colour. This so-called *kashi* work was a favourite mode of decorating brick buildings in the days of Shah Jahan, and is common in the buildings of his reign at Lahore. But the decoration of the fort wall is unique in that in several of the panels figures of living beings have been introduced. Many panels depict elephant fights, the favourite recreation of the Mughal Court. The elephants are full of vigour, but the same cannot be said of the camels and horses. The spandrels are decorated with winged figures of Persian fairies (*pari*) in floating robes, carrying a fan or a lamb or holding a horned demon with horns tied in front.

On the wall of the Saman Burj two panels depict a camel fight, and one, much damaged, shows four Mughal horsemen playing polo, the goal posts consisting of two upright slabs. *Polo, or chaugan*, as it is called in Persian, was a favourite sport at the Court of the Great Mughals.

On the N. wall beneath the Khwabgah of Jahangir may be seen a pair of fine blue dragons (the dragon, or *azhdaha*, was one of the emblems carried in front of the Emperor), while another panel shows the familiar scene of the goat and monkey-man.

The enamelled tile-work on the N. wall belongs, perhaps, to the reign of Jahangir, but that on the Saman Burj and on the W. wall may be safely ascribed to the beginning of Shah Jahan's reign.[2] A Persian

[1] The account of the Lahore Fort is based on Dr Vogel's *Historical Notes on the Lahore Fort* (*Journal Punjab Historical Society*, 1911, 1, 38-55).

[2] The old elephant route into the fort is also closed. It originally gave access directly to the Shish Mahal Court.

[1] On these tile mosaics, see *Journal of Indian Art and Industry*, vol. 14, Nos. 113-17.

[2] See the *Mosaics of the Lahore Fort* by Dr J. Vogel.

inscription over the Hathi Pol records that Shah Jahan built a Royal Tower (*Shah Burj*) in A.D 1631-2, which is now known as *Saman Burj*.

Three distinct building periods are noticeable in the palace proper —the early Mughal palace, completed by Jahangir in 1617-18, Shah Jahan's palace, completed in 1631-2, and the additions due to the Sikhs, who restored the palace after a period of neglect. Harm done by military occupation (terminated 1927) has been partly remedied

From the *Hathi Pol* two roads lead up to the palace buildings The ancient road, now closed to the public, starts to the N (left) of the gate, and by a twisted flight of steps leads up to a courtyard which, by a marble gate, communicates with another court adjoining the square of the *Saman Burj*. It was once the private entrance to the imperial palace The modern road is a ramp of military construction which takes the visitor to the W. end of what was once the quadrangle of the Diwan-i-'Am. The cloistered row of buildings forming this square was demolished after the military occupation, except a block in front of the Pearl Mosque, or *Moti Masjid*. This will convey some idea of the original cloister Over the gate there is a marble slab with a Persian inscription which records the completion of the early Mughal palace by Ma'mur Khan in the twelfth regnal year of Jahangir—1027 of the Hijra (A D. 1617-18)

This gate and the little courtyard behind give access to the Pearl Mosque, or **Moti Masjid**, apparently the earliest of four buildings of the name[1] It is of white marble, with a court in front. The Sikhs converted it into a treasury, and it was continued to be used as such until it was rescued by Lord Curzon, who ordered its restoration in 1903-4 The variety of ceiling construction in the various compartments of the prayer chamber should be noticed

The **Diwan-i-'Am**, in the centre of the fort, consists of two distinct buildings The smaller at the back (N side), which consists of rows of small apartments, is the older portion which existed in the reign of Jahangir The open hall in front, supported on four rows of ten sandstone pillars, was added by Shah Jahan in the first year of his reign, so that his courtiers, when attending the daily public audience, might be sheltered The entire superstructure is modern, and the buildings appear to have been reconstructed, perhaps during the Sikh period The most interesting part is the throne balcony, or *jharokha*, in which the Emperor used to make his daily appearance. Between the front row of columns may be observed remnants of a white marble railing, whilst along the platform in front of the hall a red sandstone railing is partly preserved. These railings separated the nobles, according to their rank and dignity

The historical associations of the *Diwan-i-'Am* are many It was probably here that Manucci rejoined Dara Shikoh after his defeat at Samugarh[1] Manucci has an extraordinary story about some golden pigs which were made by order of Jahangir to annoy the Mullahs, for (he said), when he awoke, he would rather see these pigs than the face of a

[1] The Pearl Mosque in the Agra Fort was built by Shah Jahan, that in the Delhi Fort by Aurangzeb, and that at Mahrauli, or Old Delhi (Kutb), by Bahadur Shah I.

[1] Nicolao Manucci, *Storia do Mogor*, translated by William Irvine (Murray, 1907), vol. 1, pp 158, 309

Muslim After his death Shah Jahan had them buried "in front of the royal seat in the fortress of Lahore" In the days of Ranjit Singh the *Diwan-i-'Am* was known as *Takht*—*i.e.*, the Throne It was here that after Ranjit Singh's death his body lay in state Dr Martin Honigberger, his court physician, gives a graphic description of how he met in the great courtyard one of the four Queens who were to be burnt with the remains of their royal husband [1]

At the back (N.) of the *Diwan-i-'Am* is the oldest portion of the Lahore palace. It is usually designated as the Quadrangle of Jahangir, although it is possible that these edifices go back to the reign of Akbar They consist of two rows of buildings facing each other, with sandstone porches characterised as early Mughal by eaves supported on ancient brackets The carved work on the two slightly-projecting edifices at the ends of both rows is particularly fine

In the centre of the N. side of the quadrangle the *Bari Khwabgah*, ascribed to Jahangir, but evidently modernised, has been converted into a Museum (1928) with a collection of Sikh weapons and old plans of the Fort The central portion of the quadrangle was once occupied by a square tank and ornamental garden

The smaller square adjoining Jahangir's Quadrangle on the W. has preserved more of its original character. It is occupied by a formal garden, with a platform and fountain in the centre. The open pavilion on the N. side of this garden is the *Chhoti Khwabgah*, or Lesser Bedchamber, which may be safely ascribed to Shah Jahan. It is a pavilion of white marble supported on five rows of five pillars carrying scalloped arches. The archways on the N. are closed with pierced screens An eave, supported on brackets, runs along the four sides of the building The roof has a parapet with marble facing decorated with a border of *pietra dura* The interior is paved with variegated marbles, and the centre is occupied by a fountain basin scalloped out and inlaid with semi-precious stones, most of which have disappeared For more than forty years the *Chhoti Khwabgah* was used as a garrison Church It was restored at the instance of Lord Curzon The marble ceiling is modern

Below the *Khwabgah* a ruined structure will be seen at the foot of the fort wall It is the *'Arzgah*—*i.e.*, the place where in the morning the nobles assembled to pay their respects to the Emperor Note the panels mentioned on p 353

The next court is called *Khilat Khana* In the N W corner of the adjoining square there is an open pavilion which dates from the reign of Ranjit Singh, and was used by him as a *Kachahri*, or Court of Justice Its Sikh origin is clearly indicated by the combination of white marble and red sandstone brackets, and the juxtaposition of marble trellis screens with red sandstone posts in the ornamental railing on the roof of the building. The curious frescoes on the N. wall, relating to the legend of Krishna, are evidently the work of one of Ranjit Singh's court painters

The court in the N W corner of the palace is *Saman Burj* [1] (p 354), formerly the *Shah Burj*, or Royal Tower The inscription

[1] Honigberger, *Früchte aus dem Morgenlande*, p. 111 (English translation, p 97)

[1] The word *saman* is an abbreviation of Arabic *musamman*, meaning "octagonal"

over the *Hathi Pol*, which records the completion of the Shah Burj in the 4th year of Shah Jahan's reign (A D 1631-32), refers to this group of buildings

A large hall, now known as *Shish Mahal*, or Palace of Mirrors, occupies the N side of the square. It was here that in March 1849 the sovereignty of the Punjab was assumed by the British Government, as is recorded on a marble tablet let into the wall, and the Koh-i-nur diamond was handed to Sir John Lawrence The *Shish Mahal* is built on a semi-octagonal plan. Its largest side, facing the square, has a row of double pillars of inlaid white marble, forming five archways surmounted by an eave of the same material Within, the spandrels over the arches are decorated with *pietra dura* The graceful vine pattern over the two outer arches deserves special notice. The main room, a rectangular hall of noble dimensions, has a dado of white marble, while the upper portion of the walls and the ceiling are decorated with mosaic of glass laid in gypsum, which accounts for the name of Palace of Mirrors. This decoration belongs to two different epochs. The ceiling, with its prevailing aspect of subdued gilt, formed undoubtedly part of the original edifice The wall decoration is inferior, with sherds of blue and white china It is typical Sikh work The central hall is surrounded by a row of nine smaller rooms decorated in the same fashion In the largest of these rooms, at the back of the main hall, is a marble screen of trellis-work. The roof of the *Shish Mahal* is encumbered with structures dating from the Sikh period

The ornamental marble pavilion, with "Bengali" roof, which stands on the W side of the square, is called *Naulakha*—a modern name which is explained from its having cost nine lakhs of rupees to build. The building undoubtedly belongs to the beginning of Shah Jahan's reign, like the other buildings of the *Saman* (or *Shah*) *Burj*. The *pietra dura* decoration of the marble dado is entirely in the style of his reign, but the inlay in the panels above the dado is of a very different type, and recalls some of the work found on the Golden Temple at Amritsar In one of the dado panels there appears a "Chinese" cloud converted by the Sikhs into a bird The painting and mirror work of the wooden ceiling is also certainly due to the Sikhs The roof must once have been covered with sheet copper and pinnacles of the same metal

The remaining buildings of the *Shah Burj* are not remarkable The courtyard is paved with grey and variegated marble, and the centre is occupied by a reservoir In the N W corner of the court there is a stone floor, measuring 9 ft 6 in square, which does not belong to the original pavement It belonged originally to a mansion in the city, and was purchased by Ranjit Singh. An apartment in the N E. corner of the square is indicated as Sher Singh's bath-room It belongs to the original palace, but was altered by the Sikhs to suit the requirements of a Hammam

N W of the Fort is Minto Park

Leaving the Hazuribagh by the S gate, and turning E. into the crowded city streets, the **Sonehri Masjid**, or Golden Mosque, is reached This has three gilt domes, and was built in 1753 A.D by Bikhari Khan, a favourite of the widow of Mir Mannu, a lady who governed Lahore a short time after her husband's death. He is said to have displeased the lady, whose female attendants beat him to death with their shoes.

In a courtyard behind the mosque is a large well, with steps descending to the water. It is said to have been dug by Arjan, the fifth Guru

A street with some fine balconies leads E. again from here to a *chauk*, or square, where is the very beautiful **Mosque of Wazir Khan** It was built in 1634 by Hakim 'Ala-ud-din of Chiniot, Governor of the Punjab under Shah Jahan The brick walls are faced inside with inlaid work, Nakkashi, a kind of mosaic of glazed tiles, with a yellow ground The colours of the tiles are burnt in, the individual tile patterns being in hard mortar Over the entrance is written in Persian "Remove thy heart from the gardens of the world, and know that this building is the true abode of man" In the centre front of the mosque is the Muslim creed, and in panels along the façade are beautifully written verses from the Koran The structure and its decoration are notably Persian in character From the gallery round the minarets, about 3 ft broad, there is a view over the city

Beyond the *chauk* and the Delhi Gate of the city, the Landa Bazar leads to the railway station The palace of Dara Shikoh and the great Tripulia Bazar lay between the city and the station, and the houses and gardens and tombs of the nobles extended along the Ravi as far E as Shalimar The ruined tomb of Mir Mannu adjoins the open space W of the railway station, the mosque of Dai Anga, E of the station (restored at the instance of Lord Curzon), was built by a foster-mother of Shah Jahan in 1635.

In the old town the balconies and projecting oriel windows of the irregular brick houses, together with the variety and colour of the costumes of the people, form a striking picture The most effective corners will be found at the N. ends of the streets leading from the Mori and Lohari Gates. S. of the latter the Anar Kali Bazar runs for ¾ m down to the Punjab Museum To the E of it lie the King Edward Memorial, with the Albert Victor Memorial wing, the Lady Aitchison Female Hospital, and the Lady Lyall Nurses' Home A college for girls commemorates the visit of Queen Mary in 1912

At the Multan and Bahawalpur road junction is the ruined Chauburji (Four Towers) This led to the garden of Zebunnissa Begam a daughter of the Emperor Aurangzeb, and is faced with blue and green encaustic tiles This lady, who died in 1669 A.D., long before her father, and who was a poetess under the name of Makhfi (Hidden), is said to have been buried at Nawan Kot, 1 m S from this garden

Excursions from Lahore

(1) The **Shalimar Gardens** are 5 m E on the Amritsar Road from the main railway station About half-way to them is the gateway to the **Gulabi Bagh**, or Rose Garden, laid out in 1655 by Sultan Beg, Admiral of the Fleet to Shah Jahan The Nakkashi work of coloured tiles on the gate is hardly inferior to that on Wazir Khan's Mosque On the gateway is inscribed in Persian:—

'Sweet is this garden, through envy of it, the tulip is spotted,
The rose of the sun and moon forms its beautiful lamp'

Close to this is the tomb of Sharfunnissa Begam, sister of Zakaria Khan, which is decorated with representations of cypress-trees in enamelled plaster

N.E. of Maclagan College is the village of Begampur The

ruined octagonal tomb to the E., known as the Bagga Gumbaz, or White Dome, is the tomb of Yahia Khan (d 1748) Near by are the mosque and grave of Zakaria Khan and his father, in a garden of the former, whose palace was at this place Nearer the river again is the garden tomb of Shah Bilawal, a saint honoured by Shah Jahan, where Maharaja Sher Singh was murdered in 1843

Opposite to the Gulabi Bagh, and within a railway enclosure to the S of the road, is the **Tomb of 'Ali Mardan Khan**, the Mughal engineer, who created the Shalimar Gardens Its lofty archway retains traces of exquisitely coloured tiles 50 yds S of this is the octagonal tomb, built of brick, now much ruined, in Mughalpura, where the railway workshops are

The **Shalimar Gardens** were laid out in 1637 A.D by order of Shah Jahan They are divided into three parts, in tiers of different levels, the highest was known as the Farhat Bakhsh, and the two lowest as Faiz Bakhsh. The whole extent is about 80 acres, surrounded by a wall, with a large gateway and pavilions at each corner The original pavilions were of white marble Canals traverse the garden, and there is a tank in the centre with an island and a passage across to it. There are one hundred small fountains in the first garden, and double that number in the tank The trees are chiefly mangoes

On the opposite side of the road are two other gardens, the **Sindhanwala** and **Misr Brij Lal's**, to the E. is the fine garden of **Jamadar Khushhal Singh**, and across the road to the N.E. that of **Lehna Singh**.

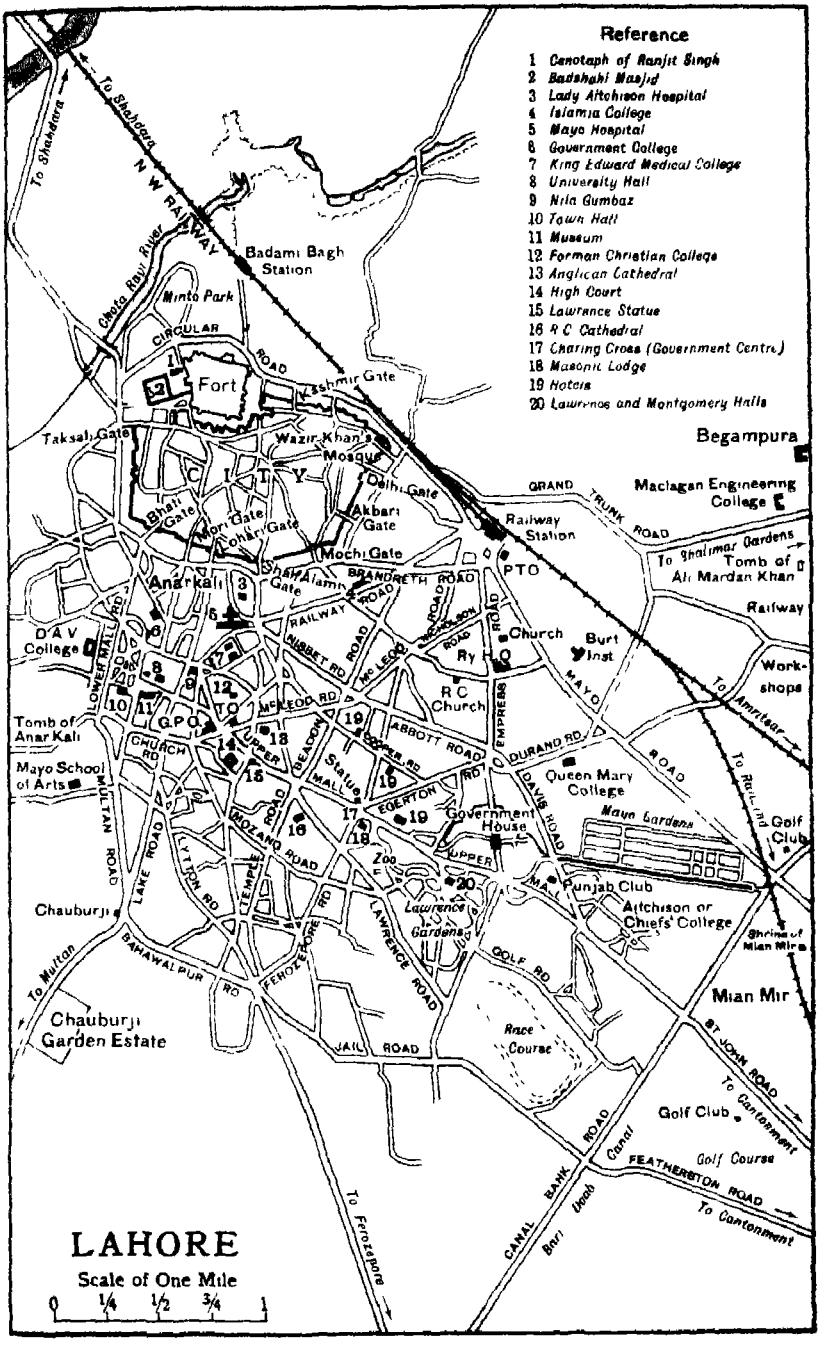
(2) 4 m from Lahore on the line to Raiwind (Route 19, p 393) is **Lahore Cantonment** stn. The Cantonment lies 5 m. to the S E of Lahore Civil Station At Mian Mir, Jowahir Singh, uncle and minister of the infant Maharaja Daulip Singh, was executed by the Sikh army in 1845.

After crossing the canal by the road from the main railway station to the Cantonment, is the *Shrine of* **Mian Mir**, a saint from whom the Cantonment derived its former name, and who was honoured by the Emperors Jahangir and Shah Jahan, his real name being Muhammad Mir It stands in the centre of a quadrangle 200 ft sq , on a marble platform Over the entrance is an inscription in Persian giving the date = 1635 A D The left side of the enclosure is occupied by a mosque

Near the Garrison Church are memorials to Sir Charles Napier and Sir Michael O'Dwyer

Three sepoy regiments and the 8th Bengal Light Cavalry, stationed at Mian Mir in 1857, outnumbered the British troops by four to one, but were disarmed on 13th May in the presence of the Judicial Commissioner, Mr Robert Montgomery, Sir John Lawrence being at the time in Rawalpindi

Returning towards the railway station, on the right is the village of **Shahu-ki-Ghari**, where are a number of large tombs, all more or less ruined At the corner of Nicholson Road is Kila Gujar Singh, fort of a Bhangi Sardar, and upon the main road from the Civil Station to the railway station, is the most vener-


Reference
1 Cenotaph of Ranjit Singh
2 Badshahi Masjid
3 Lady Aitchison Hospital
4 Islamia College
5 Mayo Hospital
6 Government College
7 King Edward Medical College
8 University Hall
9 Nila Gumbaz
10 Town Hall
11 Museum
12 Forman Christian College
13 Anglican Cathedral
14 High Court
15 Lawrence Statue
16 R C Cathedral
17 Charing Cross (Government Centre)
18 Masonic Lodge
19 Hotels
20 Lawrence and Montgomery Halls
To Shahdara
N W RAILWAY
Badami Bagh Station
Chhota Ravi River
Minto Park
CIRCULAR ROAD
Fort
Kashmir Gate
Taksali Gate
Wazir Khan's Mosque
Delhi Gate
Bhati Gate
Lohari Gate
Akbari Gate
Mochi Gate
Shah Alam Gate
Begampura
GRAND TRUNK ROAD
Maclagan Engineering College
Railway Station
To Shalimar Gardens
Tomb of Ali Mardan Khan
Railway
Anarkali
BRANDRETH ROAD
PTO
RAILWAY ROAD
D A V College
LOWER MALL RD
Church
Burt Inst
Work-shops
To Amritsar
RUSSELL RD
McLEOD ROAD
RC Church
EMPRESS ROAD
MAYO ROAD
Tomb of Anar Kali
GPO
CHURCH RD
ABBOTT ROAD
DURAND RD
Mayo School of Arts
MULTAN ROAD
UPPER BEACON MALL
Statue
COOPER RD
Queen Mary College
To Raiwind
Golf Club
EGERTON RD
Government House
DAVIS ROAD
Mayo Gardens
MOZANG ROAD
Zoo
UPPER MALL
Punjab Club
Aitchison or Chiefs' College
Shrine of Mian Mir
LYTTON RD
LAKE ROAD
TEMPLE ROAD
Lawrence Gardens
Chauburji
To Multan
BAHAWALPUR RD
FEROZEPORE RD
LAWRENCE ROAD
GOLF RD
Mian Mir
Chauburji Garden Estate
Race Course
JAIL ROAD
ST JOHN ROAD
To Cantonment
Golf Club
Canal
FEATHERSTON ROAD
Golf Course
To Cantonment
CANAL BANK ROAD
Bari Doab
To Ferozepore
LAHORE
Scale of One Mile
0 1/4 1/2 3/4 1

ated tomb in Lahore or its vicinity. It is called the **Tomb of Bibi Pakdaman** (the chaste lady). According to tradition, this saint was the daughter of the younger brother of 'Ali by a different mother. Her real name was Rakiya Khanum, and she was the eldest of six sisters, who are all buried here, and who fled with her from Bagdad after the massacre at Karbala, she died in 728 A D, at the age of ninety Visitors are expected to take off their shoes. There are five enclosures, and the tomb of Rakiya is in the fifth It is of brick, whitewashed

(3) **Shahdara** is situated on the W bank of the Ravi, N of the railway and road bridges, from which the **Tomb of the Emperor Jahangir** is 1¼ m It is convenient to go by motor (about 5½ m drive)

Before crossing the railway is seen (right) the tomb of **Nurjahan**, wife of Jahangir, a plain building of one storey After crossing the railway a domed building is passed on the right This is the tomb of Asaf Khan (see below)

Immediately E of it is the *sarai* or outer court An archway of white marble, and 50 ft high, leads into the garden court of Jahangir's mausoleum, once the Dilkusha garden of the Empress Nurjahan (Mihr-un-nissa) The low building on a terraced platform has four minarets, 95 ft high, at the corners and a small pavilion over the tomb chamber in the centre[1] The passage to the tomb chamber is paved with beautifully streaked marble The cenotaph is of white marble, inlaid with *pietra dura* work, and stands in the centre of an octagonal chamber. On the E and W. sides are the ninety-nine names of God, most beautifully carved, and on the S. side is inscribed, "The Glorious Tomb of His High Majesty, Asylum of Pardon, Nur-ud-din Muhammad, the Emperor Jahangir," 1627 A D On the four sides are screens of lattice-work. The lamp over the tomb was presented by the Maharao of Kotah.

Outside the entrance a staircase leads up to the flat roof of the terrace, covered with a marble tesselated pavement The marble parapet which ran round the pavement was taken away by Maharaja Ranjit Singh, but has been restored. The minarets are four storeys high, and are built of magnificent blocks of stone 8 ft long. From the top there is a view over the Ravi to the city of Lahore

The **Tomb of Asaf Khan**, brother of the Empress Nurjahan, is an octagon surmounted by a dome. It shows marked Persian influence It has been almost entirely stripped of the *kashi* work which once adorned it, in the portals some fragments still remain The cenotaph is of white marble The Tughra writing on it resembles that on the tomb of Jahangir The gardens here and round the Emperor's Tomb have been much improved Asaf Khan and his sister had entire control over the indolent Jahangir during the last years of his life. Before marrying Jahangir, Nurjahan was married to an Afghan, Ali Kuli Khan, who lived at Burhanpur Jahangir compassed his death, and carried Nurjahan away to Delhi, as she refused to marry him, he imprisoned her in a small palace, and made her an allowance of 14 annas a day. Eventually Asaf Khan

[1] The model of the tomb was that of Itimad-ud-daula at Agra (see p 272)

persuaded her to marry Jahangir On his death Nurjahan wished a younger son of the Emperor married to her daughter by her Afghan husband to succeed him: but Asaf Khan stood by Shah Jahan, and the ex-Queen retired into private life. Asaf Khan died in 1611, having attained to the rank of Khan-i-Khanan and Governor of Lahore, his tomb was erected by Shah Jahan, who was himself born at Lahore Nurjahan survived her brother for four years

(4) 26 m. W. of Lahore is **Shaikhpura** (Sheikhupura), once Jahangirabad, the hunting-seat of Jahangir and of Dara Shikoh, the eldest brother of Aurangzeb The road crosses the bridge over the Ravi Further up-stream the river-pavilion of Kamran has been demolished The country has been turned by the Upper Chenab Canal from a jungle into an agricultural tract The Canal is crossed at mile 18 On the way the Deg a famous local stream, is crossed

On the left, at Shaikhpura, is a garden-house built by Rani Nakayan, Queen of Ranjit Singh At the S.W. corner of the garden is her Samadh, an octagonal building. Over the door is a picture of the ten Gurus, with an inscription. Across the road is a very clean and comfortable house which belongs to the Raja Jagirdar, grandson of Maharaja Teja Singh, and is lent by him to travellers The Raja resides in the old fort here Shaikhpura (D B K) is now the hdqrs of a district A town has sprung up to the W of the old village

ROUTE 17.

LAHORE to **PESHAWAR** and the **KHYBER PASS** by **Gujranwala**, **Wazirabad** Junction (for **Sialkot** and **Jammu**, also for **Lyallpur** and **Khanewal**), **Gujrat**, **Lala Musa** Junction (for Western Punjab), **Jhelum**, **Rohtas**, **Manikyala**, **Rawalpindi**, **Golra** (for **Khushalgarh** and **Kohat**), **Taxila**, **Hassan Abdal** (for **Abbottabad**), **Attock**, and **Naushahra** (for **Hoti Mardan** and the **Malakand**)

Lahore to Peshawar Cantonment is 288 m by the North-Western Railway

The railway was constructed by the State on the metre gauge, as the Punjab Northern Railway, and opened to Peshawar in 1882

4 m The bridge over the Ravi river was constructed in 1875, with a length of 3217 ft, reduced in 1893 to 1465 ft It carries a road also

5 m from Lahore, **Shahdara** station The tomb of the Emperor Jahangir, 1¼ m off, is described on p 359 (Route 16). From here a branch line runs (57 m) to Sangla Hill (p 362) and Lyallpur (85 m)

38 m Here the main Upper Chenab Canal (opened 1913) is crossed

43 m **Gujranwala** station (R., three R H, Canal Dept, P.W.D, and Municipal Committee) Headquarters of a District, and the birthplace of Ranjit Singh. At the S.E. corner of the town is the *Samadh of Mahan Singh*, his father, an octagonal building, 81 ft high to the top of the gilt

ornament on the summit. Within are the sculptured rosettes or knobs which mark where the ashes are deposited. The large rosette surrounded by twelve smaller ones is inscribed "Sarkar Ranjit Singh." That nearest the entrance is in memory of a blue pigeon that fell down into the flames in which Ranjit Singh and his concubines were being consumed. Other rosettes mark the ashes of Mahan Singh Padshah, Maharaja Sher Singh, and Sarkar Nau Nihal Singhji. There is a narrow but lofty pavilion, covered with mythological pictures, among which is one of Duryodhana ordering Draupadi (p lviii) to be stripped. As fast as the clothes were pulled off her she was supernaturally reclothed. At 100 yds. to the E is the pavilion of Mahan Singh. Close to the market-place is the **house where Ranjit Singh was born**, with a frieze of geese round the courtyard.

N.E. of the town is the *Baradari*, or pavilion, of the famous General Hari Singh Nalwa, who was killed in January 1837 at Jamrud (p 379) in action against the Afghans. It stands in 40 acres of garden and grounds and is private property, used by the Dist. and Sessions Judge. To the E is a pavilion 12 ft high, full of small niches for lamps. On the E. wall is a painting of warriors and elephants, now almost gone. At 70 yds to the N of the house is the Samadh of Hari Singh. The place where the ashes (brought from Peshawar) lie is marked by a knob shaped like a budding flower. There are no *sati* memorials. A picture on the wall inside is a portrait of Hari Singh hawking, with a string of ducks passing over his head. The gardens round Gujranwala are famous for Malta oranges. Gujranwala is known for its iron safes, which are being exported in large numbers.

62 m. **Wazirabad** junction station (R., D.B with four suites). This place, founded by Wazir Khan in the reign of Shah Jahan, became under Ranjit Singh the headquarters of Avitabile, who built a completely new town on the plan of a parallelogram, surrounded by a wall. A broad bazar runs from end to end. Wazirabad is famous for its cutlery, sword-sticks, and tennis rackets.

N is the great *Alexandra Bridge* over the Chenab, opened in 1876 by King Edward VII., then Prince of Wales. It was 9088 ft long, but was reduced in 1895 to 3976 ft., and again in 1927 to 2423 ft. By the construction in 1922 of a road bridge of 17 spans, 20 ft wide, the Grand Trunk road is now bridged throughout from Calcutta to Peshawar, except for a gap over the river Son in Bihar (p 61).

The Chenab is subject to sudden furious floods. 20 m. S is the ford and battlefield of Ramnagar (1848).

From Wazirabad a branch line runs N.E. to Sialkot and Jammu.

27 m. **Sialkot** station (D.B.K., alt 880 ft.). Tennis rackets and hockey sticks are made of mulberry.

Sialkot is identified with the ancient Sagala, the capital of the Indo-Greek Menander (the Milinda of the Buddhists) and of Mihirakula the Hun. The *Church* is a striking object, having a steeple 150 ft high. Near the railway station and the city is a lofty old fort, in which the British residents took refuge on the mutiny of the 46th Bengal Infantry and a wing of the 9th Light Cavalry on 9th July 1857. A number were killed. After these outrages, the mutinous cavalrymen invited two of the surviving field officers to command them with higher pay and a guarantee of furlough to the hills every hot season!

At Marala (N of Sialkot) are headworks of the Upper Chenab Canal, which runs to the Balloki barrage on the Ravi river and feeds the Lower Bari Doab Canal

The railway continues to Jammu, and there is a branch from Sialkot S E to Narowal (39 m.), junction on the Amritsar line

52 m **Jammu** station (D B K., alt 1127 ft.) This is the winter hdqrs of the Maharaja of Jammu and Kashmir, and the capital of the Jammu Province The ruler, H.H Lieut.-General Maharaja Sir Hari Singh, G C S I., G.C.I.E., G.C V O., A D C to the King (born 1895), succeeded in 1925 his uncle, Sir Pratap Singh, who was the grandson of the famous Dogra[1] Maharaja, Gulab Singh, to whom Kashmir was made over in 1846, after the First Sikh War (See Kashmir, Route 18) His family had governed Jammu since 1820.

The **Old Palace** at Jammu, to the N E of the city, is entered by a large irregular quadrangle, on the right side of which is a vast reception-room The veranda of the small reception-room overlooks the Tawi River

W. of the city is a temple covered with plates of copper-gilt A little to the N. of it is the building constructed for the visit of King Edward VII when Prince of Wales, in 1876., the Prince of Wales College commemorates that of King George V in 1905, before he became King Close by, to the E., is the old parade ground, with the hospital and college to the S E.

1 The term "Dogra" was originally applied to the Rajput clans in the hills and submontane tracts to the N. of the river Ravi In later years it came to include the hill Rajputs to the S of the Ravi, and in military usage it denotes all such Rajputs who enlist in the Indian Army. The 37th, 38th and 41st Dogras (now the 17th Dogra Regiment) have a fine war record.

The *Gumti Gateway* gives access to the River Tawi by a flight of dressed stone steps A road leads to the Residency R H., in the S.E. corner of the city. 2 m. S. of this gate is a fine garden belonging to the Maharaja.

The Banihal route to the Kashmir Valley starts here (see Route 18). The Ramnagar palace belonging to the Maharaja is on a high bluff on the River Tawi where the Maharaja Hari Singh road leaves Jammu town, a suspension bridge (1888) has been replaced by six girder spans (1931)

Another branch line S W from Wazirabad runs through the Rechna Doab by Sangla, 68 m., and **Lyallpur**, 96 m. (D B K), after Sir J B Lyall, G C I E., Lieutenant-Governor, 1887-1892, to Shorkot Road junction, 163 m., and Multan to Kharewal, 201 m There is a network of lines required to convey grain to Karachi

The district of **Lyallpur** is the largest wheat-exporting district in India, and grows American cotton Its existence depends on the irrigation afforded by the Lower Chenab Canal, and the area is 3511 sq m It contains a specially-selected population. The irrigated area amounts to 1,541,906 acres. The Panjab Agricultural College is at Lyallpur

71 m from Lahore **Gujrat** station is the headquarters of a district. The town (D.B.K., alt 780 ft.) stands on the ancient site of two earlier cities. The second, according to General Cunningham, was destroyed in 1303 A D Two centuries after this Sher Shah was in possession of the country, and either he or Akbar founded the present town. Akbar's fort stands in the centre

of the city. It was first garrisoned by Gujars, and took the name of Gujarat Akbarabad. Akbar's administrative records are still preserved in the families of the hereditary registrars During the reign of Shah Jahan, Gujrat became the residence of a famous saint, Pir Shah Daula, who adorned it with numerous buildings. In 1741 the Ghakkars established themselves at Gujrat, and in 1765 the Sikhs acquired the country. The **Civil Station**, in which is the D B., lies to the N. In it is a Church of Scotland Mission Church, burnt in the troubles of 1919

The Battlefield.—The decisive Battle of Gujrat, which ended the Second Sikh War, was fought on the 21st of February 1849 The two villages of Kalra, 2½ m S of the D B, were the key of the Sikh position, in a flat plain Lord Gough's camp had been at Wazirabad, but upon being joined by the force which had captured Multan under General Whish, he moved it to Shadiwal between 17th and 19th February Thence at 7 A M on the morning of 21st February the British army of 25,000 men and nearly 100 guns, advanced on the Sikh position at Kalra. The artillery went to the front and poured their fire on the Sikh army, which comprised six brigades of infantry with fifty-nine guns, and four great bodies of Sikh cavalry with 4000 Afghan horse The heavy English guns opened on the Sikhs at 1000 yds, and crushed their lighter metal As the Sikh fire ceased, the British field-batteries were constantly pushed forward By 11 30 A M. most of the Sikh guns had been withdrawn, dismounted, or abandoned. The British infantry then advanced, deployed, and drove the Sikhs from their position in Kalra. There was no attempt to make a further stand at Gujrat, and the Sikh army streamed away in utter defeat to the E. and W. of the town, which was occupied by one o'clock The British losses were only 766

Next day General Gilbert, with 12,000 men, started in pursuit of the enemy, and at Rawalpindi received the submission of the entire Sikh army on 14th March.

In the cemetery at *Shah Jahangir*, called after a fakir of that name, are the tombs of those who fell in the battle. Beyond, to the E, are two mosques one of which is rather remarkable Gujrat is one of the starting-places for Kashmir (see Route 18)

83 m **Lala Musa** junction station (R)

The Sind-Sagar line runs W to the Indus, and then S 345 m to Sher Shah junction, S of Multan (p 394) It was opened throughout in 1887.

At 21 m **Chilianwala** was fought, in the Second Sikh War, on 13th January 1849, the most desperate of all the battles between the British and the Sikhs The Sikhs advanced from their position on high ground between Rasul on the N to Moong on the S., and opened a heavy fire on the British troops, and Lord Gough ordered a general attack on them, though only a very short time of daylight remained In making this the two brigades on the left under Sir Colin Campbell became separated, and that of Brig-General Pennycuick was checked, and finally had to fall back, while the absolute failure of the cavalry on the right of the British line exposed the divisions there to a flank attack, which prevented their advance. Finally the troops were recalled, the British losses being 2238, and several British guns were captured An obelisk has been erected on the mound to the E. from which Lord Gough watched

the battle. Alongside of the obelisk is a cross and a small cemetery, in which General Pennycuick and his son and the officers of H M 24th Regiment, which suffered most of all, and other officers are buried

Alexander the Great crossed the Jhelum somewhere in the neighbourhood of Rasul (on a branch from Mandi Baha-ud-din jn), and defeated Porus in 326 B C , not very far from the field of Chilianwala At Rasul there is an Engineering College.

At 45 m **Malakwal** junction, a short line runs to Bhera (18 m), where finds have been made , a second branch runs S W to Sargodha junction (for Khushab) and Hundewah junction for Chak Jumra, in the Rechna Doab, crossing two channels of the Chenab river (1932) This second branch continues to **Shorkot Road**, crossing the Chenab river by the Rivaz bridge, 2314 ft long (1906) At Trimmu (14 m S W of Jhang) is the Emerson Barrage, at the junction of the Jhelum and Chenab rivers

At Shorkot Road lines from Wazirabad and Lahore (Shahdara) running through the Lyallpur District converge Crossing the Ravi river by the Abdul Hakim bridge, near the Sidhnai dam, this branch continues to Khanewal and Lodhran on the Sutlej river

49 m from **Lala Musa** junction the Victoria bridge over the Jhelum river is 2720 ft long (1887)

At 51 m. **Haranpur** junction for the Khewra Salt Mines.

Mayo Mine. — A famous salt mine at **Khewra**, in the Pind Dadan Khan tahsil. it would be well to write beforehand to the Manager There are three R Hs for the accommodation of travellers When the salt was first worked is not known, but excavations existed on the spot as far back as the time of Akbar, and the miners have a tradition that their first settlement dates from the 6th century of the Muhammadan era. The existing mine was named after Lord Mayo in 1870

57 m **Pind Dadan Khan**, a centre for several excursions

Katas —A sacred pool in the centre of the Salt Range, 15 m N of Pind Dadan Khan, at an elevation of over 2000 ft It is visited every year by thousands of pilgrims, who come to bathe in its waters The Brahmanical story is that, Siva being inconsolable at the death of his wife, Sati ("The True One"), tears rained from his eyes and formed the two pools of Katas, or Kataksha ("Raining Eyes"), and Pushkar, near Ajmer At the foot of Kotera, the W hill, are the remains of twelve temples, clustered in a corner of an old fort. These are called the *Sat Ghara*, or seven temples, and are popularly attributed to the Pandavas, who are said to have lived at Katás during a portion of their seven years' wanderings At Amb, S W , is a temple in the Kashmiri style The village of **Choa Saidan Shah** (good R H) is noted for roses and attar

Nandana —A place 14 m W of Choa Saidan Shah, in a remarkable dip in the outer Salt Range Near by are extensive remains of a temple, a fort, and a large village The temple is in the Kashmiri style, but faces W instead of E , as temples of that style usually do Of the fort two bastions of large well-cut sandstone blocks still remain Nandana is mentioned as the objective of one of Mahmud of Ghazni's expeditions in 1014 Early in the 13th century it was held by Kamruddin Karmani, who was dispossessed by a general of Jalaluddin Sultan of Khwarizm.

The latter was defeated on the Indus in 1221 by Chingiz Khan, one of whose officers—Turti, the Mongol—took Nandana and put its inhabitants to the sword It appears in the list of places conquered by Altamsh, who entrusted it to one of his nobles

Jalalpur.—An ancient site on the right bank of the Jhelum River, identified by Sir Alexander Cunningham with the site of the ancient Bucephala, built by Alexander the Great in memory of his famous charger, which was killed in the battle with Porus at the crossing of the Jhelum, Sir Aurel Stein has accepted the identification Jalalpur is now the seat of one of the leading Muslim "Pirs" of the Punjab, and is annually visited by a large number of disciples at the time of the *Urs* (anniversary of the death of the founder)

Malot—A fort and temple on a precipitous spur projecting from the Southern edge of the Salt Range, about 9 m from Katas The fort is said to have been built five or six centuries ago by Raja Mal, a Janjua Chief, whose descendants still hold the village The temple, with its gateway, stands on the extreme end of the cliff. They are in the earlier Kashmiri style, built of coarse red stone, much injured by the action of the weather The temple is 18 ft. sq inside, with remarkable fluted pilasters and capitals, on each of which is a kneeling figure

Siv Ganga, 3 m. N.E of Malot. In it stands a small temple in the later Kashmiri style, and near Warala, a hamlet on the adjacent spur, a broken Buddhist sculpture was found some years ago and set up by Hindus in a small temple at Siv Ganga, but having been rendered useless for purpose of worship, the Hindus allowed its fragments to be sent to the Lahore Museum, where it was restored. The relief originally contained eighteen or nineteen figures, the central one, a Bodhisattwa, carved in a somewhat late stage of Gandhara art.

105 m **Khushab** junction, on the right bank of the Jhelum river, a place of great antiquity Branch crossing the river by the Montmorency bridge, 2385 ft long (1931), to Shahpur City and Sargodha junction (29 m., altitude 614 ft.)

120 m **Mitha Tiwana**, recruiting centre for the 19th K G O Lancers, whose Hon Colonel was Major-General Sir Umar Hayat Khan, A D C to the King

158 m **Kundian** junction for Campbellpur (p 373) on the "Mari Attock" line which starts and ends at neither Mari nor Attock The Sind Sagar railway (1887) now turns S through a desolate and salty tract on the left bank of the Indus

209 m **Darya Khan** for Dera Ismail Khan (D B K), formerly Akalgarh, 12 m distant, W of the Indus, in the N W F Province There is a bridge of boats in the low-water season and a steamer ferry at times, otherwise special arrangements must be made On 1st Jan 1871 Sir Mortimer Durand, who fixed the boundary between India and Afghanistan, and had become Lieut.-Governor of the Punjab in 1870, lost his life at Tank by an accident and is buried in the churchyard here Roads run to Bannu, Tank (42 m.), and to Fort Sandeman in the valley of the Zhob, *vid* Chaudhwan Near Pezu on the Bannu road is Sheikh Budin on a hill (4516 ft.) which is devoid of water, but a few officials spend the summer here.

N of Dera Ismail Khan are two forts of **Kafir Kot**, close to Bilot, situated on small hills attached to the lower spurs of the Khasor range, and overlooking the Indus (no metalled road). The main features of these forts are an outer defensive wall, consisting of rough blocks of stone, some of great size, and various groups of buildings, inside resembling small Hindu temples, and more or less carved The area of these forts is considerable, and they could have held a good-sized garrison Traces are still to be seen of their arrangements for raising water from the Kachi below. Legends suppose them to have been occupied by the last of the Hindu Rajas, Tel and Bil, and they certainly point to the existence, in times before the Muslim invasion, of a Hindu Raj possessed of considerable resources and architectural skill

221 m **Bhakkar** (D.B) The table rock of the Takht-i-Sulaiman ("Throne of Solomon," 11,672 ft) can be seen to the west on clear days

320 m. **Mahmud Kot**, junction for Ghazi Ghat, where there is a railway ferry steamer for Dera Ghazi Khan (alt 398 ft.), a district of the Punjab Fort Munro (alt 6307 ft) is 51 m W

336 m. **Muzaffargarh**, where Flora Annie Steel was at one time Inspectress of Schools

346 m. after crossing the Chenab river (p. 396) **Sher Shah**, junction with the Lahore Karachi line (Route 19)

Main Line.

Beyond **Kharian** (92 m. from Lahore on the main line to Peshawar) the ry traverses a broken tract known as the Pabbi, crosses the Upper Jhelum Canal, and then the Jhelum River by a bridge, affording a view of the snows of the Pir Panjal and of the town on the N bank The bridge, 4892 ft long (1876), carries the Grand Trunk Road, on the same piers, downstream The canal runs to the Khanki barrage on the Chenab river, feeding the Lower Chenab Canal

103 m. **Jhelum** station (R, D B K), on the right bank of the Jhelum river, is headquarters of a district The Civil Lines and Cantonment lie 1 m E and W. of the town respectively Many ancient pillars have been dug up near the railway station, and amongst them one with a human face in the Greek style, which is now in a Lahore museum Another is to be seen in the railway engineer's compound The old town may have been the Bucephala of Alexander, on the opposite bank of the river

Jhelum is an important timber-depot The timber cut in the Kashmir forests is floated down the river and collected The American Presbyterian Mission maintains a hospital for women.

Tangrot, in Jammu Province, is a well-known place for *mahsir* fishing, some 28 m from Jhelum. Licence from Game Warden, Srinagar

Rohtas is 12 m N W. of Jhelum. Carriage-road to the Kahan River 8 m, and after that a cart-track along the river, and then a bridle-path below barren hills 200 ft. high This famous fort, which is partly visible from the railway,

stands on a hill overlooking the gorge of the Kahan River. Its walls extend for 3 m. in places from 30 ft. to 40 ft. thick, and enclose about 260 acres. It was built by Sher Shah in 1542 as a check on the Ghakkar tribes. There are 68 towers and 12 gateways. The entrance, up a steep path, is by the Khawas Khan Gate, on the N E of the hill. The Sohal Gate (where is the R.H.) is on the S W It is a fine specimen of the Pathan style, over 70 ft in height, with balconies on the outer walls, and is reached through the town, with a deep fissure on the left, and on the right an inner wall with a lofty gateway, called after Shah Chand Wali Within this, in ruins, is the palace of Man Singh of Jaipur, built after he occupied Kabul (1585) The S W corner is a lofty barahdari, with a stone finely carved with figures of birds, etc. In the S E corner is a smaller barahdari, about 25 ft high The wall between the two is gone There were twelve gates to the fort but they are now nearly all in ruins The Shisha Gate (an inner gate) was so called from the Harim's Hall of Mirrors, which adjoined it

The gradient between Jhelum and (135 m) **Sohawa** is still steep, although reduced from 1 in 50 to 1 in 100 by a winding realignment. The scenery of the East extremity of the Salt Range, through which the line passes, is very wild in parts

Tilla, an Eastward continuation of the Salt Range, 3242 ft. above the sea The hill is sometimes used as a summer resort by officers of Jhelum District A famous monastery of Jogi fakirs, one of the oldest religious institutions in N India, is situated here

155 m. on the main line from Lahore to Peshawar **Mandra Jn.**, branch for Bhaun, 47 m.

164 m. **Mankiala** station is the nearest point to **Manikyala Tope**, which is 1 m. distant.[1]

Manikyala was first noticed by Mountstuart Elphinstone in 1809, on a mission to Shah Shuja of Kabul, and thoroughly explored by General Ventura in 1830 In 1834 the stupa was explored by General Court,[2] and thirty years after by Sir A Cunningham There are coins taken from it, at different levels, of Kanishka and Huvishka which date from the beginning of the Christian era, but with them was found a coin of Yaso Varmma, who reigned not earlier than 720 A D, and many silver Sassano-Arabian coins of the same period General Cunningham thought that the stupa may have been originally built by Huvishka, who deposited coins of his own reign and of his predecessor Kanishka, and that the stupa, having become ruinous, was rebuilt in its present massive form by Yaso Varmma of Kanauj (after 720 A.D), who re-deposited the relic-caskets with the addition of a gold coin of himself and several contemporary coins of Arab governors

The dome of the stupa, which was probably about 100 ft high, is an exact hemisphere, 127 ft. in diameter. The outer circle measures 500 ft. in circumference, and is ascended by four flights of steps, one in each face, leading to a procession path 16 ft in width ornamented both above and below by a range of dwarf pilasters The tee has gone

Fergusson said (1, 96) "It is, indeed, one of the most marked characteristics of these Gandhara topes that none of them possess, or ever seem to have possessed, any trace of an independent rail, but most have an ornamental belt

[1] Cunningham's *Archæol Rep*, 2, 152. Fergusson's *Ind Arch.*, 1, 94. James Prinsep's *Journal*, vol 3.

[2] Ventura and Court were European officers in the service of Ranjit Singh

of pilasters, joined generally by arches simulating the original rail. This can hardly be an early architectural form, and leads to the suspicion that, in spite of their deposits, their outward casing may be very much more modern than the coins they contain" Here the Sikh army surrendered in 1849

At 2 m to the N of Ventura's Tope is Court's Tope Here the earth is of a bright red colour, and General Cunningham identifies this stupa with that mentioned by Hiuen Tsang as "the stupa of the body-offering", while at 1000 ft to the S of it is Hiuen Tsang's "stupa of the blood-offering," attributed to its being stained with the blood of Buddha, who, according to a curious legend, is said (in a previous existence) to have offered his body to appease the hunger of seven tiger cubs. The stupa of the body-offering was opened by General Court, who found in a stone niche, covered by a large inscribed slab, three cylindrical caskets of copper, silver, and gold, each containing coins of the same metal, four gold coins of Kanishka were found in the gold box; in the silver box were seven silver Roman denarii of the last years of the Republic, the latest being M Antonius Triumvir, and therefore not earlier than 43 B C. The eight copper coins in the box belonged to Kanishka and his predecessors. The inscription has been studied by M. Senart and Professor Lüders

General Cunningham ran trenches across another mound, and brought to light the outer wall and cells of the monks, forming a square of 160 ft.

176 m. Sohan river

180 m. **Rawalpindi** Cantonment junction* for Basal (56 m, p 373), (D B., Hotels, R.) This is the headquarters of a Civil Division and District (alt 1687 ft), and of Pakistan Army Command The city and Cantonment have a population of 181,169. It received its name from Jhanda Khan, Ghakkar Chief, who restored the town of Fatehpur Baori, destroyed by an invasion of the Mughals in the 14th century

A Mall runs for 4 m through the station, forming part of the Grand Trunk Road Near the club is a memorial statue of the late Queen Victoria. The *English Church* is about 1 m from the railway station, and near by is the *Scotch Church* The *Fort* is about ½ m S of that again. The *Public Garden* by this is a park of 40 acres, with a low forest well preserved, and close by is the *Golf Course* (18 holes)

Rawalpindi is the starting-place for **Murree**, 37 m, alt 6989 ft (motor service). There are two D Bs on the road—one at Barakao, 13 m, and the other at Tret, 26 m from Rawlpindi Barracks were erected in 1853 The houses are built on the summit and sides of an irregular ridge, and enjoy magnificent views over forest-clad hills into deep valleys, studded with villages and cultivated fields, with the snow-covered peaks of Kashmir in the background On the S E is the Lawrence School for the children of English soldiers The loftiest peaks behind the sanatorium attain a height of over 9000 ft. The climate is well adapted for Englishmen, the lowest recorded temperature being 21°, the highest 96°. Visitors should consult the Municipal Office for information

The small stations in the hills

N. W. of Murree, known as the Galies (Barian, Ghora Dacca, Khanspur, Doonga, Changlagali, Khairagali, and Nathiagali), are most conveniently reached from Murree. The most Northerly of them, **Nathiagali**, is the summer residence of the Governor of the N.W. Frontier Province The walks through the Galies are lovely in spring—nothing in the whole Himalayas is more beautiful The roads from Abbottabad (p. 372) are not suitable for wheeled traffic

Rawalpindi is also the starting-place for **Kashmir** by Murree and the Jhelum Valley. This is the best route into the country (see Route 18) Official publications showing the rates for transport to Kashmir available at the Ry Stn

16 m beyond Rawalpindi, on an eminence above the little Margala Pass, is the monument of General John Nicholson, with the following inscription —

"Erected by friends, British and Native, to the memory of Brigadier-General John Nicholson, C B., who, after taking a hero's part in four great wars, fell mortally wounded, in leading to victory the main column of assault at the great siege of Delhi, and died 22nd September 1857, aged 34

189 m. **Golra** junction for the line to Basal junction At Basal (56 m) the line is crossed by that from Campbellpur (p 373).

200 m. **Taxila (Saraikala)** junction (D.B.) for the line (3½ m) to Havelian (9½ m from Abbottabad, see p. 372), and station for the ruins of Taxila (ancient *Takshasila*). Refreshment and waiting-rooms at station. It is most conveniently visited by car from Rawalpindi (21 m) along the Grand Trunk Road, off which motor roads run close to the principal objects of interest To visit all the remains two days are required. Trains allow about six hours only For a prolonged visit there is a small P.W D Bungalow about 1 m away, permission to occupy which may be obtained from the Executive Engineer, P W D , Rawalpindi District. Near the station is the Archæological Museum, where permits can be had to view the excavations (See *Guide to Taxila*, by Sir John Marshall, 1936, obtainable at the Office.)

A "Bareilly" cart can generally be obtained at Saraikala, but it is advisable to arrange for it in advance. In this and other matters the Overseer of the Archæological Museum gives what assistance he can

The remains (discovered 1852), E and N E , are spread over an area of some 25 sq m They comprise three distinct cities. The earliest of these is situated on the Bhir mound (at the N end of which stand the Archæological Museum and bungalow), and was in occupation for some centuries before about 180 B C The second city, known as Sirkap, N E. of the mound on the farther side of the Tamra Nala (*Tibero-nalo* or *Tiberopotamos* of the Greek historians), a tributary of the Haro river, appears to have been built by the Bactrian Greeks and to have been occupied successively by the Scythians, the Parthians and the early Kushans. The third city, now called Sirsukh, about 1 m N E of Sirkap, was probably founded, as shown by the "diaper" masonry, by the Great Kushan Emperor Kanishka (dates uncertain) and flourished for some five or six centuries In this city the Chinese pilgrim, Hiuen Tsang, sojourned and from it the distances and directions to the various monuments described by him are calculated Little of this city is visible. Besides these three cities, to each

of which the name of Taxila (Takshasila) was transferred in succession, other outlying monuments have been excavated, the most important among them being the Dharmarajika Stupa near the village of Shahpur, on the S side of the Hathial spur, a massive temple with Ionic pillars at Jandial, N of Sirkap, and two groups of Buddhist buildings, one in a defile in the hills near the village of Mohra Moradu, about 1 m. S E of Sirsukh, and the other on a hill near the village of Jaulian There is a less accessible fortress of Giri, dating from 400 A D , possibly a refuge from the White Huns.

A good plan is to drive to the Dharmarajika Stupa, walk (about 1¼ m N W) through a defile in the hills to the stupa of Kunala, and descend into the city of Sirkap The conveyance can go round to the N side of Sirkap, and the visitor can drive to the Temple of Jandial, and thence E to Mohra Moradu and Jaulian The **Museum** (opened in April 1928) contains ten thousand coins collected since 1913

The remains at the **Chir Tope** (ancient name *Dharmarajikastupa*), and so called because it has been "split" by earlier excavators, comprise a large number of Buddhist stupas, chapels and monastic dwellings near Shahpur and the Hathial spur In the centre is the Main Stupa, erected possibly in the time of Asoka, but subsequently enlarged The decorative stone facing on the E side dates from about the 4th century Around the main edifice there originally stood a circle of small stupas, but a series of chapels was constructed on their ruins, and numerous other stupas and chapels were erected round about, with a monastery to the N The buildings on this site are constructed in various styles of masonry, and as their relative ages have been ascertained they offer reliable data for fixing the age of other monuments in this part of India. Among them the visitor should notice in particular the chapel in the N E corner with the feet of a colossal figure of the Buddha, once about 35 ft in height, a small apsidal Chaitya on the W. side of the Main Stupa, and a chapel not far from it, where relics of the Buddha, accompanied by a Kharosthi inscription on a silver scroll (of the year 136 of Azes = 78 A D), were discovered

The **Stupa of Kunala**, at the S end of Sirkap, is said to commemorate the spot where Kunala, the son of the Emperor Asoka and Viceroy of Taxila, had his eyes put out through the guile of his step-mother Tishyarakshita The story, which resembles that of Phædra and Hippolytus, is told by Hiuen Tsang

The original stupa, only about 10 ft in height, can be seen emerging from the core of the larger structure on its W. side It was erected probably by Scytho-Parthians , the larger structure was built around it about 300 A.D and extended over the ruins of an ancient city wall An exceptional feature of this later stupa is the concave curvature of the plinth—an idea which was perhaps borrowed from the Greeks Immediately to the W of the stupa is a spacious monastery

From the Kunala stupa a view can be obtained of the city of Sirkap below and the broad Haro Valley beyond The monument about 5 m distant on the last spur of the hills bounding the valley on the N , is the **Stupa of the Head-gift**, now known as the Bhallar stupa, in the monastery belonging to which Kumaralabda composed his Buddhist treatise

The remains excavated in **Sirkap** comprise the main street

running N. and S., with the fortifications at its N. end and a variety of buildings separated by lanes laid out with considerable regularity The buildings visible on the surface belong mainly to the Parthian and early Kushan period Beneath are two layers of buildings of the Scythian period and below these two more layers of the Greek period (190-85 B C) Among the latest remains are a number of houses, several small shrines, believed to be Jaina, a large Buddhist apsidal temple, and a palace closely resembling in plan the palaces of Assyria

The houses were two- or three-storeyed with chambers around open courts They were occupied either by several families or by professors with their numerous pupils, for Taxila was the most famous seat of learning in ancient India and attracted students from far and near A feature of the houses, which is noticed also by Philostratus in his *Life of Apollonius*, is that there are underground rooms (*taikhanas*), access to which was provided by trap-doors from the chambers above Large numbers of antiquities, including domestic utensils, have been found Noteworthy among them are an Aramaic inscription of about 400 B C, a head in silver repousse of the Greek god Dionysus, a bronze statuette of Harpocrates, the Egyptian child-god of silence, and gold jewellery of Greek workmanship

The **Temple at Jandial**, N of Sirkap, dates from about the Christian era, and is planned like a Greek temple, with the addition of a solid tower or *ziggurat* between the *naos* (sanctuary) and *opisthodomos* (back porch), from which the rising and setting sun could be observed. This and other considerations (notably the absence of images) suggest that it was a temple of Zoroastrian fire-worshippers during the Scytho-Parthian period It is possible that this is the temple described by Philostratus where Apollonius waited before entering the city of Taxila

The Buddhist stupas and monasteries at **Mohra Moradu**, S E of Sirsukh, and **Jaulian** are well preserved Those at *Mohra Moradu* were first erected about 200 A D, two or three centuries later images and reliefs, which adorn the walls, were added The monastery was two-storeyed and consisted of a court surrounded by 27 cells, with several additional chambers, on its E side, one probably a bathroom and another a refectory In one cell of the larger court was a perfect stupa, with all its umbrellas complete (in the Museum), and in the same court are several interesting groups of stucco figures The main stupa, W of the monastery, is chiefly remarkable for the masterly stucco reliefs of the Buddha and his attendants which are now in the Museum From it a charming view is obtained of the Mohra Moradu gorge and valley of the Haro below

The remains at **Jaulian** (E of Mohra Moradu and on a hill) are of the same character, probably slightly earlier The stupa is enclosed by courts surrounded by a series of chapels, and there are numerous smaller stupas adorned with unique stucco and clay reliefs In one of the smaller stupas (to the S of the main edifice) was discovered a remarkable relic casket of lime plaster, painted and studded with gems Among the antiquities found in the burnt monastery was a half-charred manuscript of birch bark in Brahmi of the Gupta period.

209 m by rail from Lahore is **Hassan Abdal** station (D.B.), famous for the so-called *Lalla Rookh's* [1] tomb, which is close by; also on account of the spring of *Baba Wali*, or, as the Sikhs call it, Panja Sahib. Baba Wali was a Musalman saint, and one version of the local legend is that Baba Nanak, the founder and Guru of the Sikhs, caught a rock thrown at him by Baba Wali, who had refused him water, and commanded water to flow from it. (The impression of Guru Nanak's hand is said to have remained ever since, and at one end of the tank there is a rude representation of a hand in relief on a rock, from underneath which the water flows into the tank.) This place has been appropriated in turn by Buddhist, Brahman, Muslim, and Sikh. The shrine of the saint Pir Wali Kandahari is on the peak of a lofty and precipitous hill best climbed from the S.

The Panja Sahib Sikh Gurdwara is at the E. entrance to the town, on the right. The road to it through the town leads down to a brook, crossed by stepping-stones. A Sikh temple has been constructed at the tank, which is a beautiful pool of water canopied with mulberry and pipal-trees, and full of mahsir, some of them as big as a 15-lb salmon. The walk leads some 250 yds along the stream, past some ruins of Jahangir, and past another pool, to Lalla Rookh's tomb, which is very plain, and stands in a garden surrounded by a wall, with four slim towers, one at each corner; the enclosure is well filled with trees, amongst which is a cypress more than 50 ft. high.

At Wah, a mile from Hassan Abdal, is a large cement factory; and also a Mughal garden, said to have been built by Akbar, who exclaimed, "Wah! Wah!" at the view. It is a Protected Monument, in the charge of the family of Sardar Muhammad Hayat, to whom it was given after the Mutiny.

At Haripur, 20 m from Hassan Abdal, is a memorial to "Colonel Canora," who was killed defending his guns against the Sikh insurgents in 1848. "Canora" is a corruption of Kennedy, an American deserter from the Navy who became a colonel in the Sikh service, and with Holmes (at Bannu), Foulkes, and other European officers, lost his life refusing to take part in the Sikh War against the British.

From Hassan Abdal to **Abbottabad** (D.B. and hotel), 44 m by metalled road, *viâ* Havelian. A branch line of the N.W.R. runs from Taxila Jn. on the main line to Havelian, 9½ m from Abbottabad. The quickest route is now by taxi, from Havelian. Abbottabad is a pretty hill station, (alt. 4010 ft.). The name is derived from Major James Abbott, who (1840-53) pacified the district after the British annexation.

There is a metalled motor road from the Grand Trunk Road through Hassan Abdal and Abbottabad to Kashmir, *viâ* Mantschra (16 m.) and Domel (Route 18).

The following hill stations are reached from Abbottabad by roads not practicable for wheeled traffic: Thandiana, 16 m.; Nathiagali, 21 m.; Dungagali, 23 m. (hotel), Changlagali, 30 m. (hotel). Pack and coolie transport can be obtained by applying 10 days in advance to the Contractor at Abbottabad.

[1] The last poem in *Lalla Rookh*, that of the "Fair Nurmahal," was recited by the disguised Prince at Hassan Abdal.

231 m. from Lahore, on the main line to Peshawar, is **Campbellpur** junction, headquarters of the Attock district. An important strategic line (1899) runs, *vid* Mianwali (alt. 681 ft), to Kundian jn (p 365), feeding lines which cross the Indus

20 m from Campbellpur Basal jn connects with a direct line (1881) from Golra jn near Rawalpindi

36 m Jand jn for a branch (1902) to Kohat Cantonment (37 m), crossing the Indus at Khushalgarh by a cantilever bridge (one span 491 ft and one 291 ft, with a roadway, built in 1908) N of the road are the hills of the Jowaki Afridis, against whom an expedition was sent in 1875-6 From Kohat (alt 1710 ft) a N G line (1903) continues to Thal, running under the Samana range of the Orakzai, against whom expeditions were sent in 1889 and 1892 On this range is Fort Saragarhi (p 337) By the Chagru Kotal near Hangu (27 m, alt 2750 ft) two divisions crossed in 1897 to occupy Maidan in Tirah, the heart of Afridi territory, and the action of Dargai was fought close to the Kotal Thal (62 m) is at the mouth of the Kurram Valley, detached from Afghanistan in 1879, and taken under political charge in 1892 The tribesmen are Shias A road leads to Parachinar and to the Peiwar Kotal, crossed by Lord Roberts in the Second Afghan War in 1879 The Safed Koh range, with a high peak, Sika Ram, runs along the N side of the valley In 1919 the Afghans invaded and marched down the valley to Thal, where they were met and defeated by Brig.-General Dyer, who acted with great resolution.

Between Thal and Bannu is the Ahmadzai salient of tribal territory (occupied 1940) with Kafir Kot (alt. 4000 ft) in the Juni Ghar range.

From Kohat a road runs to Peshawar (40 m) through territory of the Adam Khel Afridis, with a rifle factory not far from the road. It can be traversed in daylight only Kohat was the place from which Miss Ellis was abducted in 1923 [1]

74 m from Campbellpur the Sohan river bridge is 1200 feet long, 98 feet high above the bed.

92 m, at Daud Khel jn., a branch crosses the Indus below the gorges by a bridge 3057 feet long (1931) to Kalabagh, and a narrow-gauge railway (1913) runs to Laki Marwat jn (52 m). Here a branch (1913) runs to Bannu, formerly Edwardesabad (1250 ft), at the mouth of the Tochi Valley, which leads to Datta Khel *vid* Miranshah (2982 ft) A circular road takes off leading to the Cantonment of Razmak (7000 ft) in the Mahsud country, with a branch road to Wana, in the Wazir country, N of the Gumal river. The N G railway (1916) continues to Pezu (26 m) and Tank (46 m) and meets the circular road near Manzai (68 m from Laki Marwat) Murtaza, near Tank, is on the Gumal River, by which route the Powindahs come down from Afghanistan with their flocks and herds, to return in the spring, occupying as much as six miles of the road at a time

122 m from Campbellpur jn. Kundian, junction with the Sind Sagar railway (p 365)

Main Line.

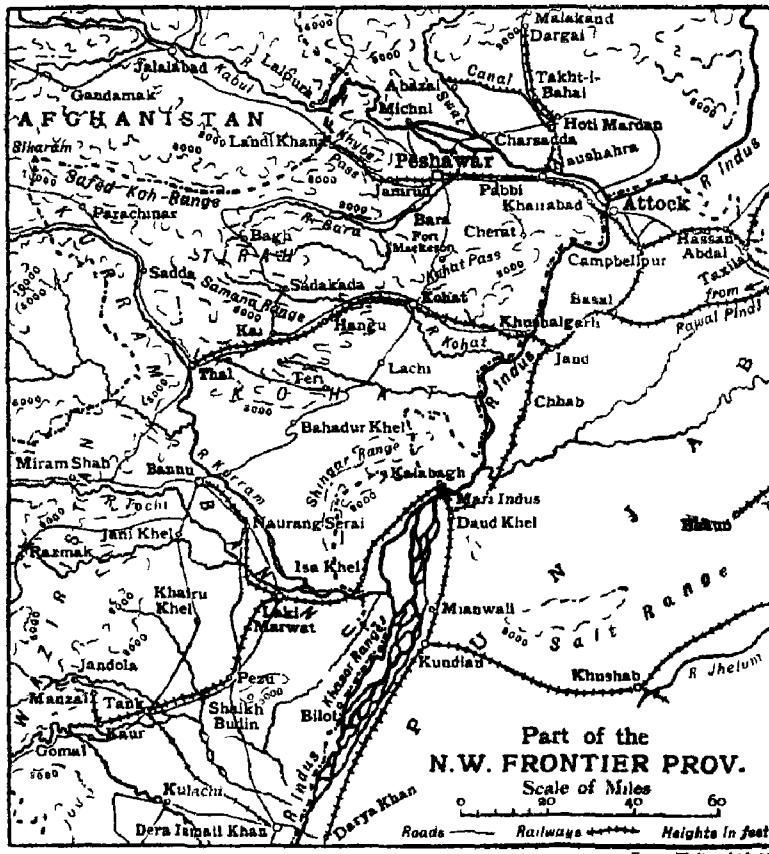
241 m by rail from Lahore is **Attock Bridge** station (D B.), 1

[1] *Tales of Tirah and Lesser Tribes*, by Mrs Lilian Starr, Hodder and Stoughton, 1924

m. below the town and fort. The railway crosses the Indus by a *Bridge* (1885), which was difficult to construct, owing to the rapidity of the current It is on steel trestles encased in piers, has two spans of 308 feet and three

An endeavour to tunnel under the bed failed

The **Fort**, situated on a commanding height, overhanging the E bank of the Indus, and a little to the S of the point where it receives the *Kabul River* on the W.



of 257 feet, and is 100 feet high above low water The rails are on the top of the girders, and there is a road below, closed from sunset to dawn Each end is protected by a fortified gate The river has been known to rise 90 ft in flood near the fort, where the channel becomes very narrow

bank, is very extensive, and has a most imposing appearance. It was built by the Emperor Akbar in 1586, who also established the ferry which it commands. Maharaja Ranjit Singh occupied the place in 1813, and it remained in the hands of the Sikhs till the British conquest of 1849 Permits

can be obtained from the military authorities at Rawalpindi or Campbellpur or from the police at Campbellpur. The views extend N. and W. as far as the distant peaks of the Safed Koh.

To the N. of the fort is an old sarai, now in ruins, divided from the higher hill on which the fort stands by a ravine S of the fort is another ravine, which separates it from the village of Mullahi Tola, the ferrymen's quarter.

The hills that line the river have old round towers and ruined forts, and the Attock Fort resembles an ancient baronial castle Close to the bridge is a R.H on a hill overlooking the junction of the Indus and Kabul rivers

Outside the fort, to the W., is the tomb of a Diwan of the saint Abdul-Kadir Gilani. It stands in a small enclosure on the edge of a cliff.

Local arrangements can sometimes be made for a trip by boat down the Indus to Khushalgarh, or to Kalabagh and Mari, which will afford picturesque views of the deep, dark gorges of the Indus

244 m. **Khairabad station** (R), fine retrospect of the bridge and Attock Fort

261 m **Naushahra** (Nowshera) Junction (D B), is the headquarters of a subdivision of the same name in Peshawar District, on the S of the Kabul river The Cantonment is on both banks About 2 m distant on the Grand Trunk Road is a ruined fort built by the Sikhs

From Naushahra a branch, opened 1901 and converted from N.G. (1922), crosses the Kabul River, runs past the Cavalry and Air Force Cantonment of Risalpur and (15 m) Hoti Mardan to Dargai (41 m), at the foot of the Malakand Pass, which was the scene of severe fighting in the Chitral campaign of 1895 and in the subsequent rising of the Swat tribes (1897)

The Benton Tunnel (2 m long) utilizes water from the Swat river for irrigation and a hydro-electric grid

10 m beyond the Malakand crest, on the farther bank of the Swat river, is the Fort of Chakdarra, desperately defended in 1897

The country is full of Buddhist remains and sculptures Many specimens were secured by Sir Harold Deane, late Chief Commissioner of the N W Frontier Province, and many are in the museum at Peshawar

Hoti Mardan was headquarters of Queen Victoria's Own *Corps of Guides* (1846) The officers' mess contains Græco-Buddhist sculptures, partly found in the digging of the Swat Canal, and many hunting trophies

7 m. N E of Hoti Mardan is the famous rock of Shahbazgarhi, 24 ft by 10 ft , situated about 80 ft up a slope, with one of the great Asoka inscriptions As at Mansehra (p. 392) the script is Kharoshthi, a form of Aramaic character, introduced from Persia about 500 B C

At 24 m. from Naushahra, at Takht-i-Bahai, an isolated hill rising 650 ft , are remains of a Buddhist monastery or convent, and another at Shahr-i-Bahlol at its foot Buddhist carvings, images, and sculptures from both sites are in the Peshawar Museum.

274 m **Pabbi station.** 23 m. from here is **Cherat** (D.B.), a hill Cantonment and sanatorium for Peshawar, 4500 ft. above sea-level. A mail and passenger lorry service runs between Pabbi and Cherat There is a Govt. Fruit Farm 4 m from Pabbi towards Peshawar After crossing the Bara River, which drains Afridi Tirah,

285 m. **Peshawar City station.**

288 m. **Peshawar Cantonment** station ✱ (R , D B) 130,967 inhabitants in the City, chiefly Muslims, the residence of the Governor of the N W. Frontier Province (H.E Sir George Cunningham, 1947) It is on the left bank of the Bara stream Kabul is 190 m distant from here, a two days' journey by car, but the British Minister in Kabul must be consulted The N W Frontier Province, which was constituted by Lord Curzon in 1901, and a Governor's Province 1931, includes the Hazara, Peshawar, Kohat, Bannu, and Dera Ismail Khan Districts (taken from the Punjab), and the Political Agencies of Dir, Swat, and Chitral, Khyber, Kurram, Tochi, and South Waziristan

Peshawar (Purushapura) was capital of the Gandhara Province E of the city are the mounds of Shahji-ki-dheri, covering ruins of the largest Buddhist stupa in all India (285 ft from side to side), in which a relic casket of King Kanishka, containing some of the ashes of Buddha, was discovered in 1909 This casket has been sent to Mandalay. The Pathans made their appearance about the 8th century, and the present tribes settled in the 15th century Sabaktagin, Prince of Ghazni, defeated Raja Jaipal here in 978, and his more famous son Mahmud conquered this Prince again and his son Anandpol in 1001 and 1008, and Babar passed through it in 1519 A.D The old name was changed by the Emperor Akbar, the present name meaning "Frontier Town," Pesh Awar. Until the death of Aurangzeb the place was of great importance as commanding the route to the Mughal Province of Kabul. General Gilbert occupied it on 21st March 1849.

The **City**, surrounded by a high wall, has twenty gates. The houses are built of small bricks or mud, held together by a wooden framework to protect them from earthquakes, and the streets are irregular and tortuous The Edwardes, or Kabul, Gate leads to the main Kissa Kahani street The *Ghor Khatri*, which stands high in the N E corner of the city, was successively a Buddhist monastery and Hindu temple, and is now the Tahsil The C M S Afghan Mission (1853) has a Church, also an Edwardes College, a few paces to the N of the Peshawar Cantonment station

Outside the city, on the N , is the square Bala Hissar Fort, with earthen walls 92 ft high From it and from the Ghor Khatri there is a very good view of the Peshawar Valley and hills At the Bajauri Gate is a building called Shahi Mihman Khana (Govt Guest House) Muslim cemeteries quite surround the city

The Zenana Hospital, which is named after the late Duchess of Connaught, and maintained by the Municipality, is inside the city, quite close to the Hashtnagri Gate

Peshawar has a great transit trade by caravan from Kabul and Bokhara and Central Asia The **Bazars** are well worth a visit, both for the objects on sale—many of them not seen in Central India—and for the fierce-looking and picturesquely-dressed tribesmen from Afghanistan and Central Asia.

The special manufacture of Peshawar is bright-coloured scarves, or *lungis*, worn as turbans. Waxed-cloth work and ornamental needlework are also made here, as well as knives , a special form of wood-carving flourishes.

The Cantonments, 2 m. W. of the city, and 3½ m. long by 1½ m broad, are situated on higher ground. In them are Government House, a Council Hall (1939), and the Victoria Memorial building (1907), now a **Museum** with a very fine collection of Græco-Buddhist sculptures and other antiquities Most of these were excavated at Shahr-i-Bahlol and Takht-i-Bahai (p 375), by Dr D B Spooner, who also arranged them on scientific lines and published an illustrated *Handbook to the Sculptures in the Peshawar Museum* (Bombay, 1910, R 1)

In the spring, when the roses and fruit-trees are in bloom and the fresh winter snows stand up grandly to the N and W, the place is extremely beautiful The lines of the Indian troops are situated at the Eastern and Western extremities of the Cantonment, and the barracks of the British troops in the centre The Club, Roman Catholic and Anglican Churches lie about two-thirds of the way along the Mall, which extends from the Saddar road, near the Rly station, to the Bara Gate. On a side road is the grave of a *naugaza* (nine-yard) saint At a bend in the Mall is an obelisk with gardens to the memory of Colonel Mackeson, C B, Commissioner of the Peshawar Division, who was murdered by an Afghan in 1853 Here also are the old District Courts, now used as military offices, and the cricket ground is close by. The Courts have been moved to a site near the jail

On the outbreak of the Mutiny in May 1857 Brigadier-General Sydney Cotton was in command at Peshawar, Colonel (afterwards Sir Herbert) Edwardes being Commissioner, and John Nicholson Deputy-Commissioner These decided that the formation of a Movable Column was necessary. Sir John Lawrence approved, and the Column was at once constituted. Under the command of Colonel (afterwards Field-Marshal Sir) Neville Chamberlain, then commanding the Punjab Frontier Force, and later, under General Nicholson, it was responsible for rendering harmless or destroying most of the dangerous mutinous elements still left in the Punjab. Besides the 24th, 27th and 51st Bengal Infantry and the 5th Light Cavalry, which were quartered in Peshawar Cantonment, there was a force elsewhere in the valley, amounting in all to nearly 10,000, against which could be set 2500 British at Peshawar and Naushahra. On the news of a half-hearted mutiny of the 55th Native Infantry at Naushahra on 21st May it was determined to disarm three regiments in Peshawar (the 51st mutinied on August 28th), and this was done at two parades on the 24th May, under the rifles of a British regiment supported by guns. The Naushahra men allowed themselves to be led to Mardan, where two companies had already taken the place of the Guides marching to Delhi, and on a flying column advancing from Peshawar, with John Nicholson as Political Officer, to disarm them, the whole regiment broke away in wild flight to the hills, many being captured or killed on the way, and most of the rest perishing in Swat and Buner.

There is capital *hunting* with the Peshawar Vale Hunt throughout the winter. The climate at this season is often very cold, and warm clothing is essential.

A visit may be paid to **Bara** (7 m, D B.), from which place good water is brought to Peshawar in a conduit. At intervals of ¼ m are small towers for ventilation. There is a fort at 6 m. S W. of the Cantonment, 10 m. from the pass, from which the water comes At Pusht-i-Khar, half-way between

Peshawar and Bara, is an aqueduct bridge.

In 1930 the Afridis twice attacked Peshawar and it was determined to occupy the Kajuri and Aka Khel plains to which they migrate from Tirah in the winter

Roads run from Bara N to Kachagarhi and S E to Matanni on the Kohat Road, while others run to forts and posts commanding the two plains

There are other forts at the mouths of passes into the hills—such as Michni (N W), Shabkadar, and Abazai (N), but permission to visit them is necessary

Abazai protects the headworks of the canal (1875) from the junction of the Swat and Kabul rivers at Nisatha, 15 m N E of Peshawar The headworks can be visited by car

A first-class motor road runs 37 m. from Peshawar through the Kohat Pass to **Kohat** The crest of the pass is 2800 ft high, and is in independent territory, to be crossed in daylight only A monument to Handiside, Commandant Frontier Constabulary, spans the road

Fort Mackeson lies on the left of the road, N of Aimal Chabutra, 20 m from Peshawar

Charsadda, 16 m N E of Peshawar, has been identified with Pushkalavati (Penkeleos), the capital of the region at the time of Alexander's invasion.

THE KHYBER PASS AND RAILWAY

The Khyber Pass—No one should leave Peshawar without seeing the Pass, if it is allowed The best way is to go up by car and to come down by train or rail motor (on application to the Divisional Superintendent, N W Railway, Rawalpindi). The train may not run every day and does not go beyond Landi Kotal, 34 m A car can proceed to Landi Khana (5 m farther), but the train stops long enough at Landi Kotal to permit a walk of a mile to Michni Kandao and back. Pisgah peak gives a better view, but only privileged visitors are allowed there

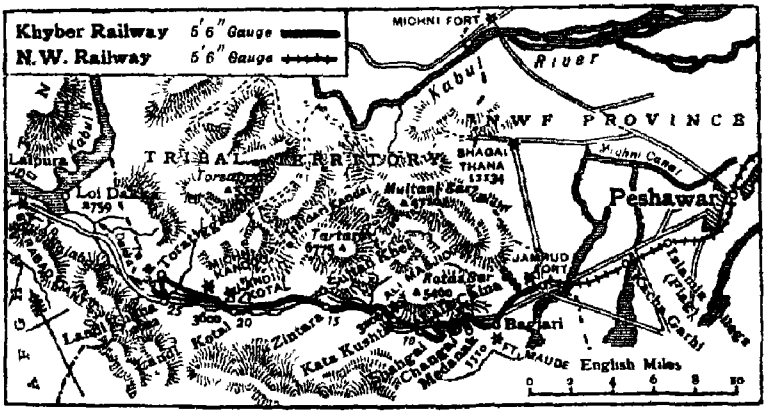
In any case it must be emphasised that an individual permit must be obtained on personal application from the Political Agent, Khyber, at his office in Peshawar Cantonment. These permits are examined at Jamrud (a Khyber toll of Rs 1 each is payable) and regulations must be strictly observed, such as the limits within which the visitor must keep Tribal unrest may lead to the closing of the Pass at any time Visitors must provide themselves with luncheon baskets, which can be obtained at Peshawar Cantonment Station or at the hotel

The charge (first class) for the train to Landi Kotal is Rs.4, with a supplement for rail motor, and for a car Rs 10, and Rs 15 return. The railway through the Pass (1920-25) is 26½ m long and cost over two millions sterling, having 34 tunnels aggregating 3 m in length, with 92 bridges and culverts, besides many road diversions and heavy work It has excited the admiration of foreign engineers, and was considered an impossible undertaking.

The Khyber Pass is not merely a valley between hills, but rises to over 3500 ft. in height and falls steeply afterwards It may not have been the route for every invasion of India from the North-West, but is full of romance. It has been for centuries the trade route from Central Asia, followed by caravans (*kafilas*) two miles long, of heavily loaded Bactrian camels with double humps, bullocks and asses, with attendant drivers and their families. The

caravans pass through on Tuesdays and Fridays in winter, on Fridays only in summer, escorted by Khassadars who also picket the hills The *kafilas* do not use the motor road, but at one or two points the two roads merge, and some confusion may arise

The railway (1901) leaves Peshawar Cantonment station and circles round the perimeter on the west The road takes off the Mall and passes through the barbed wire,



electrically lit, of the perimeter near the British Infantry barracks On the left is an emergency landing-ground for aircraft, on the right a broad space with the golf course, and a cemetery The ground is cultivated up to Islamia College (3 m) for the sons of notables in the N W F Province, opened 1915 Farther on is a mud fort, Hari Singh Burj, where the Sikh "Warden of the Marches" was cremated in 1837 Then comes a causeway over the Naraï Khwar, bridged by the railway On the far side a railway was commenced in 1905 to run into the Kabul River gorges, but it was dismantled in 1909 after an agreement made with Russia. It would not have served its purpose Kacha Garhi is then reached. A road to the left leads to Bara (p 377) To the south is a fort guarding waterworks, from which water gravitates here, to be pumped to Jamrud.

The railway and road run on over rising ground, which in spring is carpeted with wild flowers, but in summer is arid, crossing the administrative boundary of tribal territory, marked by pillars A bridge over the Jam Nala flowing from the Khyber is crossed and both railway and road curve to the left, to diverge on either side of the caravanserai, where the *kafilas* assemble and shelter for the night

Jamrud Fort (1500 ft) from a distance resembles a battleship. It was built, after the Sikhs had driven the Afghans from Attock to the foothills in 1823, by Sirdar Hari Singh Nalwa, who was killed in action here by troops of the Amir Dost Muhammad in January 1837 The walls are more than ten feet thick, with bastions and double gates, with several hornworks At the Political sarai on the left of the road permits are examined The road then divides into three, passing villages of the Kuki Khel (clan) on the way to an opening in the hills defined by a peak on each side. This is not the course taken by the Khyber stream, which emerges two miles S of Jamrud

In the First Afghan War, in 1838, Maharaja Ranjit Singh declined to permit the Division of the Bengal Army to march from Ferozepore through his territory, and therefore it had to make the long detour through Sukkur to Kandahar He did not object to an attack, which the Sikhs did not relish, on the Pass by a force raised by Shah Shuja, supported by some British artillery, and commanded by Lieut.-Col (afterwards Sir Claude) Wade, Resident at the Sikh Court Some levies, raised at Multan and in the Derajat, were commanded by Lieut Mackeson, afterwards Commissioner of Peshawar The main attack, in 1839, proceeded by the Khyber stream, but a subsidiary attack was made in the Bagiari basin, through which both roads and railway approach the Khyber valley There was some stiff fighting, but the Afghans were driven out of the Pass and a shorter way to Kabul was opened Lieut Mackeson then made the first road up to Ali Masjid, and down from Landi Kotal In 1842, after the disaster at Kabul, Ranjit Singh had died, and a considerable force was sent up under Sir George Pollock The Afghans were now supported by the tribesmen The main attack again followed the line of 1839, but in 1878 a turning movement was made by a night march through the Mullagori country to the N of the Pass, coming out at Katakushta, above the Ali Masjid gorge, just a little too late to intercept the Afghan cavalry, while the other defenders of Ali Masjid fort dispersed. The fort was abandoned before Sir Sam Browne attacked it

The Pass was held after 1890 by the Khyber Rifles, a militia recruited from the Afridis mainly, but also from other clans, including those living N. of the Pass in the bend of the Kabul River. In 1897 and again in 1908 they would not fight against their relatives, and the Pass was occupied by regular troops, while expeditions were sent to punish the turbulent Zakka Khel in the Bazar Valley S of the Pass Restored again to their trust, the Khyber Rifles deserted in the Third Afghan War of 1919, and harassed the First Division, which advanced from Peshawar A battle took place with the Afghans on the heights W of Landi Kotal, and a second near Dakka on the Kabul River Aeroplanes bombed Kabul and an armistice was granted, followed by peace Since then the Pass has been held by regular troops The Khyber Rifles were disbanded and replaced by Khassadars, who provide their own rifles, but are paid and supplied with ammunition by the Political Agent, Khyber. Their officers are tribesmen also, who have usually served in the Indian Army

West of Jamrud, the roads are crossed on the level by the railway, but the next level crossing is ten miles farther on, a rather remarkable fact. Close to the peaks which form the jaws of the Bagiari basin, after crossing a bridge, the car should be halted The railway is on the left, but circles round the Bagiari fort, and crosses the valley on a viaduct, above which can be seen the Changai spur, crowned by a fortified station building, which marks the upper reversing station, the lower being marked by a scar on the spur The railway alignment here takes the shape of a *w* to make distance and to gain height, 390 ft. in less than a mile, as the crow flies, from the viaduct. The roads fork, the left one being the caravan road, while the motor road continues under the viaduct, to turn left and ascend the Bagiari spur, up which, like Mackeson's first road, both roads

ascend A railway alignment, proposed after survey in 1898, lay high up on the left, but technical and political conditions caused it to be discarded. The gradient was 1 in 25, and it ran more than half a mile S. of the road, the limit imposed The railway gradient is now 1 in 33, while the roads rise at 1 in 13, and the railway is nowhere a quarter of a mile S of the road

Proceeding by the road, the Changai spur should be watched, and the railway will be seen emerging from a tunnel through the spur, between the two reversing stations, and above the tunnel mouth, running to bend round the head of the valley Near a small culvert, "Mackeson's Bridge," higher up the road is a Muslim shrine, above which used to hang heads of the *markhor*, a mountain goat reputed to eat snakes Near Fort Maude a railway bridge spans the roads, and beyond Mackeson, or Barley, Ridge, the roads diverge to enclose a fortress on the Shagai plateau The railway station is 2688 ft above sea level, nearly 1200 ft above Jamrud Farther on both roads and the railway are carried on the same bank at different levels across a ravine, and the caravan road runs to the left to the Khyber valley Not far down stream is a village, Lala China, near which Sir Henry Havelock Allan was killed in 1898, having left the road and his escort

Coming round a spur, a view of the limestone gorge opens out, a gorge named from a small green building, Ali Masjid. The car may be stopped here The cliffs on the N. side are precipitous, rising to the Tartarra peak (6800 ft), but both roads and the railway, much higher up, are carried along the cliffs Only fleeting glimpses of the gorge can be obtained from the railway, which is in tunnel most of the way Ali Masjid Fort stands on a pinnacle (2453 ft.) above the right bank of the stream. In the bed above are springs, from which water is pumped to Landi Kotal and Shahgai and Changai. The head of the gorge is at Katakushta, after which the valley opens out gradually Fortified towers and villages are numerous near Zintara Up to Katakushta the territory belongs, with no very clear demarcations, to the Kuki, Malikdin, Kambar and other clans, but beyond and almost up to Landi Kotal the Zakka Khel live, and round the Cantonment are many Shinwari villages The tribes can muster about 40,000 fighting men A road past the Shinwari villages leads into the Shilman country, and by a long detour through the Mullagori country back to Peshawar.

About three miles before Landi Kotal there is a Buddhist "Shpola Stupa" on a pinnacle, but it has been despoiled An image of Buddha is in the Peshawar Museum The railway bears off to the left and the road to the right, leading to Landi Kotal Fort and Cantonment (3518 ft) on the N side of the Ghatzai Ridge The old fort, burnt in 1897, was in the railway station yard, S of the ridge

The roads and the railway now begin the descent to Landi Khana, past a caravanserai The railway gradient for 5 miles is now 1 in 25 A ravine is followed with several waterfalls, which must have been obstacles to invading armies, and the railway in avoiding the roads has several tunnels. It is best to follow the caravan road to appreciate the difficulty A pumping station provides part of the water supply. At Michni Kandao a panorama opens out in a steeply sloped basin, down which it seems impossible for a railway to go, and in fact only one or two walls can be seen, for it tunnels

into the Tora Tigga valley beyond the basin to the N., and there a reversing station brings it back to Landi Khana (2500 ft.). Two openings in a bank show its presence The roads contour the northern slopes of the basin

Beyond Landi Khana a black cliff on the left of the stream bed is Tor Kham, marking the Frontier, which on the right-hand bank of the stream trends forward, as indicated by a fort on a spur The railway formation has been completed to the frontier here The valley bed carries the road to Dakka, Jallalabad and Kabul. Above Tor Kham are the red walls of Kafir Kot, probably dating back to Gandhara times, but little is known about it. It was in Afghan territory until 1919 Left of this are the springs of Bagh N.W are high black ranges, their tops covered with snow in the winter. On the S., running E and W, is the Safed Koh range

ROUTE 18.

KASHMIR,[1] and some of the routes into that country

Map faces p 392.

General Description — The *Valley* of Kashmir is an oval plain, some 84 m in length and 20 m to 25 m. in breadth, at an average height of about 5200 ft, and entirely surrounded by the snowy outer ranges of the Karakoram and Himalaya Up to the end of May, and sometimes by the beginning of October, there is a continuous ring of snowy peaks around the valley, the principal being—N of the Wular Lake, Nanga Parbat, 26,620 ft., E, Haramukh, 16,900 ft, and Amarnath, 17,320 ft, S, the Panjal range, with peaks of 15,000 ft., and W, Kazi Nag, 12,125 ft. These are all visible from the valley Farther distant, but still in the territory of Kashmir, are many peaks of over 20,000 ft, the highest of which is probably Mount Godwin Austen, 28,278 ft In the Chitral State, about 200 m N W of Srinagar, is the peak Agram, 25,426 ft, in the Hindu Kush range

The Valley of Kashmir is drained by the Jhelum and its

[1] Selected List of Books on Kashmir

C F Tyndale Biscoe, *Kashmir in Light and Shade* (Seeley, Service, 1922)

J. C M'Donnell, *Hints on Hill Travelling in Kashmir*

R B Pandit Man Mohan Lal, Langar, *A Handy Guide to Kashmir* (Cawnpore, Revised 1921)

Major Kenneth Mason, *Routes in the Western Himalaya* Vol 1, Kashmir (Government Press, Calcutta)

Pundit R. C Kak, *Monuments of Kashmir* (Published by the India Society)

Peter Young, *Himalayan Journey, Lek and Ladakh* (Jenkins)

Barbara Earl, *Trekking in Kashmir* (C and M Press, Lahore)

Notes for Visitors, Bureau, Srinagar.

Dr. Sachchinanda Sinha, *Kashmir the Playground of Asia.* (Third Edition, 1947.)

tributaries, which find an outlet in the gorge at Baramula to the Punjab. The soil is fertile Rice and maize are the chief crops The saffron (*Crocus sativus*) is famous for its yellow dye, and its cultivation is an ancient industry The floating gardens of the Dal Lake are made of long strips of the lake reed, which are moored at the four corners by poles driven into the lake bed, heaps of weed and mud being then formed into small cones on the reeds. Melons, tomatoes, and cucumbers grow upon these cones with astonishing vigour. The *singhara*, or water chestnut, grows wild in the Wular and Dal lakes, the kernel, which is white and mealy, is either ground into flour or parched, and so eaten All the fruits and vegetables of temperate climes grow well in the valley. The mulberry, bitter cherry, plum, apple, pear, grape, walnut, and pomegranate are indigenous, the apricot and peach have spread all over the valley since their introduction The forest trees grow to a great size. The principal among them are the deodar (the best, but not common), the blue pine, spruce, horse-chestnut, and plane (or *chenar*), which is the special glory of the valley Willow is grown for cricket bats

The climate is delightful in the early summer In July and August, the stillness of the air causes the heat to be oppressive in the valley, and the mosquitoes make up for their comparatively mild sting by their enormous numbers. At this period visitors are glad to ascend to the upland plateaux—Gulmarg, Sonamarg (in the Sind Valley), Nagmarg, Pahalgam (at the head of the Liddar Valley), and Gurais The spring months are showery, and the snows set in about Christmas time In 1890-1 the thermometer fell below zero In January and February 1893, and in 1915, and again on 1st January 1929, there was skating all over the Dal Lake. Very heavy falls of snow were experienced in 1930 and 1936 There was an earthquake on 1st February 1929

History—For many centuries Kashmir was ruled by Scythian Hindu Princes, who were succeeded by Tatars A Moslem, Shams-uddin, usurped it early in the fourteenth century, and in 1586 the country was conquered by Akbar, who built the fort on Hari Parbat Hill. His successor, Jahangir, made many expeditions (1605-27) to Kashmir, where he planted chenar-trees, and constructed lovely pleasure-gardens. Aurangzeb visited it once in 1664 In 1739 Nadir Shah the Persian annexed Kashmir and it passed into the hands of Ahmad Shah Abdali, the first Durani Chief, in 1748. In 1819 Maharaja Ranjit Singh's general, Misr Chand, defeated the Pathan Governor, Jabbar Khan, at Sherpayan, and annexed the country In 1846, on the close of the First Sikh War, Kashmir was assigned by treaty to Maharaja Gulab Singh of Jammu In 1939 a Constitution established a Legislative Assembly

Antiquities—The chief ruins of Kashmir are those at Patan, Parihasapura, Pandrethan, Payer, Avantipur, Martand, Harwan and Wangat. They exhibit traces of Greek influence, and are of great archæological interest

The **Coins** of Kashmir (now obsolete) are worthy of notice. (Consult *Coins of Kashmir* by Mr Rogers of Amritsar)

Routes into Kashmir

Motor facilities have changed the comparative importance of

Routes into Kashmir. The following are described below :—

I. From Rawalpindi *viâ* Murree (p 368) and Baramula.
II. From Gujrat (p 362) *viâ* Bhimbar and Pir Panjal (see p. 390).
III. From Jhelum (p. 366) *viâ* Punch (see p. 391)
IV From Hassan Abdal *viâ* Abbottabad (p 392)
V. From Jammu-Tawi (p. 362) by the Banihal Road (see p 392)

The main motor routes are I, IV and V, II and III are not available for wheeled traffic The most important is I, *viâ* Murree, but IV, *viâ* Abbottabad, though 35 m longer, is more picturesque and has easier gradients.

The N W Ry. gives alternative schemes for tours from 1st April to 2nd December The visitor can enter and leave by either Route I or Route V, or can enter by one and leave by the other The return journey must be made within 2½ months, but there is a scheme for 15 days only, including houseboat accommodation and a trip to Gulmarg The cars start at 7 a m only

(I) *Murree Route to Kashmir*

Rawalpindi (1651 ft)

By motor to

25½ m **Tret** (D B.) (3300 ft)
36½ m. **Sunny Bank** (6050 ft.)
39½ m. **Murree** (Hotels)
64½ m. **Kohala** (D.B.) (1880 ft)
Kashmir Boundary.
76 m. **Dulai** (2100 ft.)
85½ m. **Domel** (D.B) (2330 ft.)
98½ m **Garhi** (D.B.) (2630 ft.)
115 m. **Chenari** (D B.) (3800 ft)
133 m. **Uri** (D.B.) (4450 ft.)
147 m. **Rampur** (4840 ft)
162 m. **Baramula** (5183 ft.)
197 m. **Srinagar** (Hotel)

The time for the journey by motor service from Rawalpindi to Srinagar is 12 hrs. in summer. The road is well metalled all the way, though liable to interruptions from landslips in wet weather.

A Schedule of Rates (available at Rawalpindi Railway Station) for motor-cars, tongas, ekkas and bullock-carts, is published by the Visitors Bureau, Kashmir State. The more prominent Motor Agencies are Messrs Radha Kishen & Sons and the Government Motor Mail Service, and the N W. Railway Out-Agency Visitors should beware of unaccredited firms

The road ascends steadily from Barakao to Sunny Bank (D B here not recommended) and

39½ m **Murree** (see p 368) (7000 ft), and then the road descends until the *Jhelum River* is reached at Kohala

27½ m from Sunny Bank is **Kohala.** The road along the Jhelum Valley is hot in the summer months In addition to the scenery along this road, views of the snows may be obtained in April and May

After crossing the river by a lattice-girder bridge, built in 1905, where toll is levied, the road ascends the left bank all the way to Baramula.

11½ m on is **Dulai** From here the road is cut in the face of the cliff, and is liable to be blocked by landslips after rain

9½ m. on to **Domel** (D B. good), where the route from Abbottabad (Route IV, p. 392) joins in (left). Here the road turns E. at an acute angle, where the Jhelum is joined by the Kishanganga, and flows due S. About 1 m. N. is seen the town of Muzaffarabad, with one or two temples, and beyond it is a Sikh fort Dispensary here and

also Customs post where baggage has to be declared and toll paid Wheel tax for private cars. Arms must be declared.

14 m to **Garhi** Late in the afternoon this road is shaded by the high hills.

16 m. to **Chenari** (D B) The scenery is bolder and more beautiful.

18 m to **Uri** (D B good) The *Hajipir* River, which falls into the Jhelum from the S, is here crossed For the sake of the gradient the road makes a long detour The track to Punch *viâ* Hajipir Pass, 14½ m to the pass, branches off at 71 m. of the Jhelum Valley Road

142½ m from Rawalpindi, between Uri and Rampur, is the Water-power Station at Mahora (built 1905-8) which provides electric power

13 m to **Rampur** (D B good) From here the road is comparatively level An ancient temple is passed at Buniar, 26 ft sq, with trefoil arches, standing in a cloistered enclosure, and almost complete, and then the fort and village of Naushahra

15 m. to **Baramula** Here the river gorge ends Kashmir *dungas*, or house-boats, can be procured for the life on the river, or to make the journey on to Srinagar, by arrangement beforehand through one of several Agents. A barrage across the river and other obstructions have tended, however, to make the journey by water less popular. The larger *dungas* (house-boats) with a crew may be hired by the month; the smaller are generally used for kitchen and servants. English house-boats, with a shikara and cook-boat, cost according to accommodation, exclusive of the wages of the crew with or without board, and should be inspected first. Dispensary here.

North to the Lolab Valley.

On leaving Baramula *by boat* **Sopor** is passed at the entrance to the Wular Lake, N.W. of Srinagar Mahsir fishing may be obtained here in August Sopor is the starting-point for the Lolab Valley (N) and Nagmarg. When the river is high boats go from Sopor to **Shadipore** by the Noor Canal If the water is insufficient for the canal, the **Wular Lake** should be crossed early in the day, as dangerous storms sometimes arise later. This lake, extremely weedy, is 12½ m long by 5 m. broad. From the Wular the boats join the river by a small canal, which leaves the river at Hajin. 5 m. N of this is the **Lanka** Island, with the ruins of an old temple 6 m. up stream from *Hajin is* **Sambal**. *This is the* starting-point for the trip by boat to the **Manasbal Lake**, with an old temple immersed in the water at the S E end of it Shadipore, at the junction with the Sind River, is 4 m. up the river from Sambal, and Srinagar about 14 m. farther by the river. From Baramula to Srinagar by the Noor Canal takes little more than one day, by the Wular Lake, two to three days

From Baramula the traveller can go by boat up the Pohru River to **Sunawin**, the next day to **Kulangam**, and the third day, if the river is full, to **Awatkoola** (very pretty scenery). Sending the boat back to Sopor, a pleasant march may be made through the **Lolab Valley** as follows Awatkoola to *Koopwara* (8 m.); to *Lalpur* (12 m), the capital of the Lolab Valley; to *Harwan* (9 m.), remains of an apsidal temple with a stupa and chapels, and a waterworks reservoir, back to *Sopor* (10 m); and then on to

Srinagar, as above. Formerly black bears were numerous, especially during the mulberry season

South to Gulmarg (p 380).

At 16 m. S E from Baramula is **Patan** (5210 ft) with ruins of two temples of the 9th century. A few miles farther on an unmetalled road branches off to Shadipur, about a mile along this are Buddhist remains (excavated in 1914) of **Parihasapura** (8th century A D), remarkable for the enormous size of the stones They are temples of Vishnu and a monastery (Cherkuna - Vihara) built by Lalitaditya (724-760).

Srinagar * (erroneously derived from Suryanagar, Aerodrome at Damodar Karawa, alt. 5227 ft) is the capital of Kashmir State. It is beautifully situated in the centre of the "Happy Valley," has a pop (1941) of 207,787, and is divided into two parts by the River *Jhelum*, along the banks of which it stretches for nearly 2 m. The river is crossed by quaint wooden bridges, but the uppermost, or Amir Kadal, has been rebuilt on modern lines Parts of the embankment are of masonry, in which carved stones from demolished temples may frequently be noticed

The city, traversed also by canals, was built by Raja Pravarasen in the 6th century, and consists chiefly of wooden houses, some of them several storeys high, surmounted by sloping roofs covered with earth. Within the *Sher Garhi*, formerly surrounded by massive walls of the city fort, is the *summer residence* of the Maharaja The **Jami Masjid**, near the Mar Nulla, was founded by Sikandar Bakshi Khan (1390-1414), but often burnt. It was restored to the Muslims by Maharaja Sher Singh in 1841 Its principal features are the massive enclosure-wall built of brick, and the immense deodar pine pillars turned from whole trees 50 ft. high

Another wooden mosque in the city, the **Shah Hamadan**, is picturesquely situated on the river-bank. Not far from it, on the opposite (left) bank of the river, is a stone mosque built by Nurjahan, wife of the Emperor Jahangir, now a granary It is recorded that objection was taken by the local Muslims to its use as a mosque, because it was built by a woman ! Below the fourth bridge is the tomb of the widow of Sikandar Bakshi Khan, on the plinth of a 9th century Hindu stone shrine, converted into a mausoleum by the addition of domes of brick

A fine view of the city and its neighbourhood is obtained from the top of the **Takht-i-Sulaiman** ("Throne of Solomon"), 6210 ft , where there is a stone **temple**, of which the greater part dates from the 8th century. The **Hari Parbat**, (5671 ft), an isolated hill on the N outskirts of the city, should also be ascended It is surrounded by an extensive wall, and surmounted by the **Fort**, built by Akbar at the end of the 16th century. At the foot is Nagin Bagh (swimming), and an annexe of the Club

Many good subjects for the artist may be found in Srinagar

The chief industries are those of the carpet and silk factories, wood-carvers, embroidery-makers, gold, silver, and copper smiths, papier - mâché makers, leather workers, and dealers in precious stones A famine in 1843 drove shawl-makers to Amritsar

The Maharaja Partap Singh constructed a Museum and a Zenana Hospital in memory of the Diamond Jubilee of the Queen-Empress Victoria.

The Residency and the European quarter lie above the city. In the centre of the quarter is a fine ground for cricket and polo, provided by the Maharaja; on the N side of this are Nedou's Hotel and a golf course, and at the N.E. corner is the Takht-i-Sulaiman, with the entrance to the Dal Lake at its foot, not far from the C.M. Hospital. It is customary for visitors to sign their names in the Visitors' Book at the Residency.

List of Roads in Kashmir ordinarily available for motors (W. to E.)

1. Srinagar to Baramula and Domel (p. 384).
2. Baramula to Sopor (p. 385).
3. 4 m. W. of Srinagar on Baramula Rd. to Manasbal Lake (p. 385).
4. Srinagar N. *viâ* Anchar to Gandarbal and the Sind Valley (p. 389).
5. Srinagar *viâ* Gupkar, Nishat-bagh, Shalimar Bagh to Harwan (p. 385).
6. Srinagar S.E. to Khanabal and Islamabad (Anantnag) (p. 388).
7. Islamabad to Achibal, and N. up Liddar Valley to Pahalgam (p. 389).
8. Khanabal *viâ* Qazigund and Banihal to Jammu (p. 392).
9. Qazigund to Verinag (p. 389).

EXCURSIONS FROM SRINAGAR

(1) The first excursion should be to the **Dal Lake**, close to Nedou's Hotel, on the N.E., about 4 m. long and 2½ m. broad. Skirting the W. and N. sides of the Takht-i-Sulaiman from the Dal Gate, and passing through a stretch of floating gardens, the **Nishat Bagh**, on the shore of the Bod Dal, will be first reached on the E. side of the lake. The ten terraces and the water falling down them from fountains (on Sundays) are extremely beautiful, and the top terrace affords glimpses of the lake.

2 m. farther on is the **Shalimar Bagh**, on the shore of the lake, built by Jahangir, who lived there in the summer months with Nur-jahan, "The Light of the Harem." They are fully described by Bernier.

In crossing the lake to the W. a view is obtained of the mountains behind these two gardens. Beyond a small island with chenar-trees lies the **Nasim Bagh**, 6 m. by road from Srinagar, closely planted with magnificent chenar-trees. Well raised above the lake, it catches the breeze, whence its name is derived.

On the way back along the W. shore, is a village with a large mosque, called Hazrat Bal. The name of Hazrat Bal is derived from a hair of the Prophet Muhammad, believed to be preserved in the mosque. Farther on is a view of the picturesque Hari Parbat, from which the Nasim Bagh Canal leads to the Dal Gate.

The Eastern shores of the lake may also be reached on foot. Starting from the Munshi Bagh, the road leads S. of the Takht-i-Sulaiman to the edge of the lake. A romantic building, high up the mountain-side farther on, is the Peri Mahal, containing numerous fountains and tanks, now dried up, which indicate that it was originally a water-palace. Beyond are vineyards, and then, higher up, the Chashma Shahi, a small formal garden with a strong spring. The Nishat Bagh is 2 m. N., 5 m. in all from the Munshi Bagh, and Shalimar 2 m. beyond that.

(2) Starting again from the Dal Gate, below the C.M.S. Mission Hospital, and turning to the left, the Mar Nulla leads through the Northern part of the city to the W. of Hari Parbat and the Anchar Lake, across which a boat can proceed to Gandarbal, 14 m. from

Srinagar. Beyond the Dilawar Khan Bagh the canal passes under a series of bridges and balconied houses, and affords some of the most picturesque views in the whole city. Near the end of it is the Idgah From outside the Dal sluice-gate the Tsont-i-Kul, or Apple Canal, leads past the Chenar bagh (a great resort for house-boats) to the river opposite the Sher Garhi, presenting varied and beautiful views all the way. Both of these expeditions may be often repeated

(3) The **Temple of Pandrethan** (*Puranadhisthana*, the "old capital") lies about 3 m E of the Residency by road, but very much farther by boat, owing to the loops of the river above Srinagar It is about 18 ft square and 30 ft high and appears to have been built in the centre of a small stone tank. The beauty of the temple lies in its proportions, in the excellent sculptures of the interior, and in the trefoil-headed arches and roof which form the chief characteristics of the Kashmir style, unknown elsewhere except in a few out-of-the-way places in the Punjab The temple was built about 900 A.D and dedicated to Siva. On the N. side of the tank are some broken remains, including a square pillar with figures on each side of it.

(4) **Islamabad, Martand, Verinag, and the Liddar Valley** These places can be reached by the motor road up the valley from Srinagar, which forms part of the Banihal Route V into Kashmir from Jammu At 17 m is **Avantipur** (D B.), at 31 m is **Khanabal** (D.B), where the Jammu road branches off; and at 33½ m is **Islamabad** (alternative name, Anantnag). If the visitor proceeds by boat up the river, he passes at 8 m. *Pampur*, and 6 m. farther reaches *Kakapur*, for the **Temple of Payer**, 1 m distant. This temple (only 8 ft square) being complete, gives a good idea of the former beauty and elegance of the larger temples. It is constructed of eight stones only, and is dedicated to Siva Its date is about the 9th century A D In the interior is a large stone *lingam*

About 6 m above Kakapur is **Avantipur**, once a famous city and the capital of King Avantivarman, who reigned 855 to 883 A D Two of the temples built by him are still extant, a smaller and more ornate one of Vishnu-Avantisvami near the village of Avantipur, and a larger one of Siva-Avantisvara about ½ m along the road to Srinagar. Both temples were exposed by the State Archæological Department in 1914. The former has a sculptured plinth, a handsome gateway, and well-preserved peristyle.

At *Bijbehara* (10 m on the main road to Khanabal) there is a good encamping-ground above the town and bridge, fair fishing may be obtained From here it is 4 m to Khanabal, and then 2 m. by road to **Islamabad**, originally the capital of the valley The springs in the town are exceedingly picturesque, and the Wazir Bagh, to the S of it, is a pretty place to camp in.

From Islamabad one can proceed by car *viâ* Qazigund (Honey Factory) to Pahalgam (7000 ft), the road passing within a mile of the **Ruins of Martand**, which are 5½ m. N.E, and stand on an elevated plateau above the valley The roofless temple, largest in Kashmir—being 63 ft long and equally high—is also the finest example of the ancient Kashmiri style, which is remarkable for its quasi-classical features, derived, no doubt, from the earlier Indo-Hellenistic art of Gandhara and the North-West. There are reasons for ascribing its date to the reign

of Lalitaditya (A.D. 724-760). It was probably built for the worship of the sun-god, a phase of Hinduism which prevailed in Kashmir and parts of the Punjab during that period. It was largely destroyed by Sikandar Butshikan (1386-1410), sixth descendant of Shah Mirza, first Muslim King of Kashmir

A rough road feasible for motors leads to **Achibal** (7 m. from Islamabad), with a strong spring and cascades, groves of chenar-trees, the old pleasure-garden of Jahangir, and trout culture (fish can be bought). There is a bungalow and an excellent camping-ground

From Achibal a path leads *viâ Shahabad* to (13 m.) **Verinag** (6100 ft.), also accessible by a circuitous route from the Banihal Road. Here is the source of the River Jhelum, which rises in an octagonal tank in a garden near the foot of the Banihal Pass (9763 ft.). One of the recesses of the enclosure round the tank bears an inscription by Jahangir This spot was a favourite haunt of his empress Nurjahan The tank is full of sacred fish (fishing is prohibited).

On the Pahalgam Road is **Bawan**, with celebrated chenars and tanks and excellent camping-grounds. From here it is 9½ m. up the Liddar Valley to *Ishmakam*, where there is an old ziarat **Pahalgam** (Pailgam) (8500 ft.), a favourite summer resort, with good camping-ground under the pines, is 13 m. farther on, and 62 m. by motor-bus from Srinagar

From Pahalgam an expedition may be made farther up the valley to (7 m.) *Thanin*, or *Chandanwari* (10,500 ft.), whence it is a **stiff climb** to (6 m.) *Shisha Nag* (12,000 ft.), a fine sheet of water covered with ice till the month of June. From Shisha Nag it is 11 m. to *Amarnath Cave* (12,729 ft.), a famous resort of pilgrims. The expedition to the *Kolahai glacier* (24 m.) at the head of the Liddar valley is easy

From Pahalgam another route leads N. through Aru (6 m.) and Liddarwat (16 m.) into the Sind Valley This route is not an easy one, and as it ascends over 14,000 ft., it is often under snow till July The usual descent into the Sind Valley is *viâ* Sekiwās to Kulan

(5) Another beautiful expedition may be made from Srinagar up the **Sind Valley**. The first stage is either by boat or by road N. to (14 m.) *Gandarbal*, a village at the mouth of the valley, or by car to Wayil suspension bridge (18 m.). From Gandarbal the stages up the valley are—to *Kangan* (11 m.), to *Gund* (13 m.), to *Gagangair* (7 m.), and **Sonamarg** (7 m. Telegraph Office, 6 m. camping-ground at Tajiwaz)

8 m. N. from Wangan are the temples of **Wangat**, or Naghal, placed above the stream, and now the most picturesque of all the ruined temples of Kashmir. The route from Gund onwards is extremely beautiful, and the torrent pass, in which small snow glaciers will have to be crossed early in the season, leading up to Sonamarg, is extraordinarily fine. Sonamarg (8750 ft.) in the Glacier Valley was once the chief sanatorium of Kashmir. The next stage, *Baltal* (9½ m. from camping-ground, 9282 ft.), is at the foot of the Zojila Pass (11,300 ft.), leading by the Treaty Road to Dras, and **Leh**, the capital of Ladakh (nineteen marches from Srinagar) From Baltal the Cave of Amarnath (above) may be reached in the spring or early summer before the snow bridges

have melted. Provisions are not easily obtained in the Sind Valley, and there are few bungalows

(6) The ordinary route from Srinagar W. to **Gulmarg** is by car to Tangmarg, 24 m., passing **Magam** (D.B.) at mile 14; and then by pony up the ascent, 4 m. (heavy articles by coolies) There is also a pony track, 14 m from Baramula direct to Gulmarg

Gulmarg (or "Meadow of Roses") is a lovely, but somewhat rainy, spot at an elevation of 8500 ft Above it is the ridge of the Firozpur Pass and the Apharwat Mountain, 14,500 ft. The snowy peak of Nanga Parbat, nearly 26,600 ft., is in full view Gulmarg offers the attractions of golf, tennis, polo, cricket, and other amusements

(II) *Pir Panjal Route to Kashmir*

Riding or on foot		
	Gujrat to	
28 m.	**Bhimbar** (D.B.)	
39 m.	**Saidabad** (D.B.), crossing Aditak Range	
49 m.	**Naushahra** (D.B.)	
60 m.	**Chengas Sarai** (D.B.)	
73 m.	**Rajaori** (D.B.)	
86 m.	**Thana Mandi** (D.B.)	Crossing Rattan Pir
96½ m.	**Baramgalla** (D.B.)	
111 m.	**Poshiana**	Crossing Pir Panjal
122 m.	**Aliabad Sarai**	
140½ m.	**Shupiyan** (D.B.)	
166½ m.	**Srinagar**	

This route into Kashmir (see Map, p. 392) is practicable only for riding or walking

Gujrat (p. 362).

28 m. **Bhimbar** (D.B.), a considerable town, situated near the right bank of the stream of that name, and surrounded by wooded hills. Post Office and Dispensary. The road, which is fairly easy for 20 m., crosses over the *Aditak* range (2000 ft.) to

11 m **Saidabad** (D.B.), where the *Samani Sarai* is worth a visit. The road then crosses the *Kaman Goshi* range (3000 ft.), from the top of which the snows first come in sight

10 m **Naushahra** (D.B.), and camping-ground on the *Tawi River*, in which there is mahsir fishing

11 m **Changas Sarai** (D.B.) The shorter road fords the Tawi twice on the way. The D.B. is built on the right bank, about 200 ft above the river, in an old Mughal sarai Here is a very fine view of the snows

13 m **Rajaori** (D.B.) (3200 ft.), a day's march, to the E., of which there are two hot sulphurous springs The D.B. is in an old pleasure-garden on the left bank of the river, overlooking the town.

13 m. **Thana Mandi** (D.B.), along the *Tawi* Valley, which becomes very narrow, is situated at the foot of the *Rattan Pir* Pass, with a good road running through it from Punch to Jammu

10½ m **Baramgalla** (D.B.), crossing the *Rattan Pir* (8200 ft.), easy ascent, very fine scenery From this point ponies cannot be taken early in the year

14½ m **Poshiana.** From Baramgalla the road passes along a deep valley, crossing the *Sooran* torrent several times by log bridges, and ending with a steep climb. Poshiana (8200 ft.) is covered with snow till the end of May, and consists of a few shepherds' huts, which are flat-roofed. Tents may be pitched on the roofs, or the huts may be occupied, but they are roughly made and draughty.

11 m **Aliabad Sarai**

The road, very rough, now runs up the *Nilana Valley* to the sum-

mit of the **Pir Panjal** (11,400 ft.), from which there is a magnificent view of the Wardwan and Astor range There are huts of refuge on either side of the Pir in case of storms. The sarai is not habitable until May owing to the snow.

18½ m **Shupiyan** (D B), in the Kashmir Valley, a pleasant, easy walk, passing *Hirpur* (R H) on the way. There is a camping-ground here, and supplies are procurable for the first time since leaving Baramgalla A road runs (34 m) *viâ* Pampur to Srinagar Or the route through *Mohanpoora* to *Khanabal* (D B) for Islamabad (10 m) may be followed and a boat be taken (p 388) down the Jhelum river to Srinagar, about 14 hrs

From Shupiyan, on the road to Kungwata (11 m), may be visited the **Haribal** Falls (40 ft. high) of the Vshau river From Kungwaltan it is 8 m to the Konsa Nag mountain lake (12,000 ft)

(III) *Jhelum and Punch Route to Kashmir.*

Jhelum to			
13 m	**Shekhupur** (D.B)	89 m	**Sehra**
26 m.	**Tangrot** (D.B)	105 m.	**Punch** (D B)
Kashmir Boundary		115 m	**Kahuta** (D.B)
36 m.	**Chaumukh**	123 m	**Aliabad** (R H)
46 m	**Rajdhani**	130 m	**Hyderabad** (D B)
58 m	**Neki**		
66 m	**Barali**		
74 m	**Kotli**	140 m	**Uri.**

This route is long, the marches are somewhat difficult, and supplies scarce Owing to the steepness of the road in places the traveller is recommended to take coolies and travel light

Jhelum (p 366)

13 m. **Shekhupur** (D.B). The road is unmetalled, but in good order and level the whole way

13 m **Tangrot** (D.B) The road lies, for the most part, in the bed of the Jhelum, so can only be used when the river is low The mahsir fishing here is probably the best in India Licence from Game Warden, Srinagar

10 m. **Chaumukh**, crossing the Punch by a ferry The ascent is by a very rough path (only walking being possible) to the village of

10 m **Rajdhani**, prettily situated in a valley. Thence by the worst march in the route to

12 m **Neki**, which is the residence of a few cowherds No supplies obtainable

8 m **Barali**, a small village, where there is good spring water, and supplies and coolies plentiful.

8 m **Kotli**, on the left bank of the Punch The camping-ground is through the town, under some trees, among a lot of streams working twenty flour mills. Supplies, coolies, ponies, etc, abundant.

15 m **Sehra**, where black partridges abound. The scenery here is very pretty

16 m **Punch** (3300 ft, D B), on the right bank of the Sooran, the conspicuous features of which are the *Raja Buldeo Singh's Palace* and the *Fort*. Near by are very hot sulphur springs Punch may also be reached *viâ* Sooran, 16 m from Thana Mandi (p 390).

10 m **Kahuta** (D B), a cluster of huts up the Bitarh Valley, commanding a magnificent view of the surrounding mountains.

8 m to **Aliabad**, where there is a comfortable R H, some supplies are obtainable

7 m **Hyderabad** or **Bhedi** (D.B), a small mountain village beyond the Haji Pir Pass (8500 ft), where supplies are very scarce.

9½ m. **Uri**, thence (see p. 385) to **Baramula** (28 m) and Srinagar (62 m).

(IV) *Hassan Abdal and Abbottabad Route to Kashmir*

Stages from Hasan Abdal.
12 m. **Dedur** (D.B.).
8 m. **Haripur** (D.B.).
22 m *Abbottabad (Hotels), 4010 ft*
16 m **Mansehra** (D.B.), 3550 ft
19 m. **Garhi Habibulla** (D.B.)
2½ m *Kashmir Boundary* at **Ramkot** Customs Post.
11½ m **Domel** (D.B.)

(For continuation *viâ* Uri, see p. 385.)

The road is good, except in wet weather, as the river Haru is unbridged, and there is the possibility of landslips between Garhi Habibulla and Domel. The river Haru may be avoided by taking the train from Taxila Jn (D.B.) on the N.W. Ry. to Havelian, 10 m from Abbottabad.

Hassan Abdal (D.B.) (p. 372)

12 m. **Dedur** (R.H.), a roadside *sarai* and *camping-ground*

20 m **Haripur** (D.B.), a large and flourishing town, lying in a richly-cultivated valley

42 m **Abbottabad** (Hotels) (p. 372).

58 m **Mansehra** (D.B.). One of the Rock Edicts of Asoka was found here.

77 m **Garhi Habibulla** (D.B.).

88 m **Domel** (D.B.), see p. 384.

(V) *Jammu Tawi to Srinagar.*

This road, generally called the Banihal Route, is excellent for motor traffic. but in the winter and spring it is blocked by snow on the high passes. It is 206 m. long; and crosses the Chenab near Ramban (2250 ft.) and the Banihal Pass (9763 ft.) in a tunnel above Verinag (p. 389).

Stages		Accommodation
—	Jammu, 1000 ft.	D.B. Khansama
21 m	Jhajjar	
7 m	Tikri, 2455 ft	
14 m	Udhampur	D.B. Khansama
24 m	Kud	D.B.
13 m.	Batoti, 5116 ft.	D.B. Khansama
10 m	Pirah	
8 m	Ramban, 2250 ft	
16 m	Ramsu	
10 m	Banihal, 5330 ft	D.B. Khansama
30 m	Upper Munda, 7224 ft	D.B.
10½ m	Qazigund	D.B.
11½ m	Khanabal	
14 m	Avantipur, 5225 ft.	
17 m	Srinagar	Hotel

Road Toll is payable at Nandni.

ROUTE 19.

SIND AND BALUCHISTAN

(*a*) LAHORE to **KARACHI** by **Montgomery** (for **Harappa**), **Multan, Sher Shah** Junction, **Bahawalpur, Samasata, Rohri, Khairpur, Hyderabad** (Sind), **Kotri** and **Jangshahi** (for **Tatta**), and from Rohri by the right bank of the Indus to **Sukkur, Ruk** Junction, **Larkana, Dokri** (for **Mohenjo-daro**), *Sehwan, and Kotri*

(*b*) RUK JUNCTION to **CHAMAN**, on the frontier of **Afghanistan**, by **Shikarpur, Jacobabad, Sibi** Junction, and **QUETTA**, returning to Sibi by the **Harnai** route.

(*a*) Lahore to Karachi

The journey from Lahore to Karachi Cantonment (753 m) begins over the "Punjab and Delhi" railway, opened to Multan in **1865** It is almost straight from Raiwind to Multan, 184 m There is a road also (1853)

4 m. **Lahore Cantonment**, W., second station of this Cantonment

25 m **Raiwind** junction station (R) for 34 m *Ferozepore*, and 88 m., *Bhatinda* (Route 15)

104 m. **Montgomery** station (R., D B). This place, created under British rule, is, since 1865, the hdqrs. of a District formerly known as Gugaira, and received its present name from Sir Robert **Montgomery**, *Lieutenant-Governor* of the Punjab (1859-65)

Pak Pattan, 30 m S., near the **Sutlej river**, is an ancient place, **first known in history as** *Ajudhan*, **and identified by General Cunningham with one of the towns belonging to the Sudrakœ or Oxudrakœ of Alexander's historians.** Motors and tongas ply on a metalled road between Montgomery and Pak Pattan. Trains from Lahore and back allow of four hours for a visit

Originally a Hindu shrine, it was converted to Muslim worship by Baba Farid-ud-din Ganj Shakkar (1173-1265), of the Chishti family (p. 278). A great pilgrimage takes place here at the *Muharram*.

Pak Pattan is a stn on the Sutlej Valley line which runs between Kasur (p. 347) and Lodhran (p. 396). About 10 m E. are the Suleimanke headworks (opened March 1926) of the Sutlej Valley Irrigation Project (p 346)

15 m. from Montgomery station (motors available) by a canal road (with permission) or service road without restriction, is **Harappa**, one of the oldest cities in India, situated in the former bed of the river Ravi (116 m S W of Lahore). Harappa Road, the next station but one, is 4 m distant, but no facilities are available

The mounds which cover the site of Harappa have a height of some 60 ft. above the plains and a present circuit of nearly 3 m., but much of the ancient city probably lies buried. Their exploration was begun by the Archæological Department in 1920-21. Owing to prolonged quarrying for bricks the site has been much damaged, and most of the buildings exposed are in a very fragmentary condition

A Great Granary block consists of a double series of narrow halls with a broad aisle down the centre. The halls are about 52 ft in length. Recent finds are two blocks of houses for workmen, sacrificial circular platforms on Mound F, and, in H area, a ceme-

tery dating from 1500 B C, belonging to a Baluchi people with an East Persian culture In the upper layer burials were made in earthenware jars In the lower, human skeletons with funeral pottery were found Previously cremation was practised, and the painted pottery was quite different

Like those of Mohenjo-daro in Sind (p 405), the remains belong to several successive cities, one on the ruins of another They appertain to the chalcolithic age (about 2500 B C) when, with copper and bronze, stone was still being used for implements and weapons The chalcolithic culture is found as far west as the shores of the Adriatic and as far East as Japan

All the buildings brought to light are constructed of well-burnt bricks, the bonding material is usually mud, but occasionally gypsum So far as can be judged the dwelling-houses and streets of Harappa closely resemble those of Mohenjo-daro, and the social customs, religion, and daily life in the two cities were generally similar

Among the small antiquities in the local **Museum** (1927) are numerous seals of soap-stone, faience, shell, etc, engraved with legends in a pictographic script and with devices which generally take the form of real or fabulous animals The copper objects include weapons and implements, double axes, daggers, lance-heads, mace-heads, celts, and chisels. A model of a two-wheeled cart with gabled roof and driver seated in front is probably the oldest example of a wheeled vehicle yet discovered. Other objects deserving special notice are a pair of faience bangles with cogged edge and numerous rings of stone, terra-cotta, and other materials—some plain, others undulating—which appear to have been objects of cult worship

The site of Harappa was partially reoccupied during the early centuries of the Christian era, but the only remains of a later date are a *Naugaza* grave (27 ft long) of a Muslim saint and a ruined mosque Another site lies 13 m S E

178 m. **Khanewal** junction The lines serving the Chenab-Jhelum Canal Colonies, *viâ* Lyallpur and Shorkot Rd, join the main line (Lahore to Karachi) here A chord line, Khanewal to Lodhran, saves 26 m Multan is on the original, now a loop, line

Until 1878, when Multan was connected with Kotri by the Indus Valley Railway, the communication was made by the Indus Flotilla *viâ* the Chenab river

207 m **Multan city** and

209 m **Multan Cantonment** (R., D B) station (alt 401 ft)

Multan city (D B in Cantonment, 1 m from Cantonment stn) has a pop (1941) of 142,768, of whom the majority are Muslims It is 4 m from the left bank of the Chenab and not far from the old bed of the Ravi It is a place of great antiquity, and supposed to be the capital of the Malli mentioned in Alexander's time

The first mention of Multan by name is by Hiuen Tsang in 641 A.D Istakhri, who wrote in 950 A D, describes the temple of the idol of Multan as a strong edifice between the bazars of ivory dealers and the shops of the coppersmiths. The idol was of a human shape, with eyes of jewels and the head covered with a crown of gold Soon after 950 Multan was taken by the Karmatian Chief, Jelem, son of Shiban, who killed the priests and broke the idol in pieces.

It was restored in 1138. In 1666 A.D. Thevenot describes the temple of the Sun God as still standing, and the idol as clothed in red leather and having two pearls for eyes. This idol was destroyed by the orders of Aurangzeb.

Muhammad - bin - Kasim conquered Multan for the Khalifs (A D 712), and it was taken by Mahmud of Ghazni in 1005, and by Timur in October 1398. Subsequently it formed part of the Mughal Empire, and (1748) of the Durani kingdom under Ahmad Shah. In 1779 Muzaffar Khan, a Sadozai Afghan, ruled, but was killed with his five sons when Ranjit Singh stormed the place in 1818

In 1820 Sawan Mal was appointed Sikh governor He was shot in 1844, and was succeeded by his son Mulraj Upon his resignation after the First Sikh War, Mr Vans-Agnew and Lieutenant Anderson, who were sent to instal a new governor under the Regency, were murdered at the Idgah on 20th April 1848, whereupon Mulraj went into rebellion His forces were twice defeated by Lieut Herbert Edwardes from the Derajat, and he was shut up in the fort; but the Sikh forces, under the command of Maharaja Sher Singh, also went into rebellion, and this led to the Second Sikh War On the 2nd of January 1849 the city was stormed by General Whish, and the fort was surrendered by Mulraj. Since that date the whole District has been under English rule

In 1857 the garrison included two Bengal Infantry Regiments. On the arrival of Punjab and Bombay troops, the Bengal sepoys were disarmed on the 10th June; but on the 31st August they rose The surprise did not last long, and the whole of the mutineers were exterminated. Multan was the connecting link with Sind, from which the first outside assistance against the mutineers was received in the Punjab

The heat of Multan is notorious, and the rainfall, from occasional thunderstorms, is at headquarters little above 7 in The saying goes

> Dust, heat, beggars, and cemeteries
> Are the four specialists of Multan

The *Cantonment* to the W of the town, was extended to the S W and strengthened in 1888, but most of it is vacant On the N. side of the Cantonment are the *Hospital* and D B, with the Roman Catholic cemetery to the N W The Muslim cemetery, the Parsi cemetery, and the English church lie to the N

The **old Fort** is near the N of the city The entrance is by the De (Dewal—temple) Gate, so called because it leads to the famous temple of the Narsingh (Lion Man) form of Siva or Prahladpuri The original temple stood in the middle of the fort, and was destroyed by Aurangzeb, while the mosque built upon its site was totally blown up in the siege of 1848

Inside the enclosure is a modern temple, and, farther on, the **Shrine** of **Rukn - ud - din**, grandson of Bhawal Haq (below), commonly known as Rukn-i-'Alam ("Pillar of the World"). This is an octagon of red brick, bonded with beams of Sisam wood, and supported by sloping towers at the angles Over this is a smaller octagon, leaving a narrow passage all round for the muezzin to call the faithful

to prayers. Above this is a hemispherical dome. The total height is 100 ft., but as the tomb stands on high ground it is visible for 30 m. round. One of the towers was thrown down when the powder magazine blew up in the siege of 1848, and was rebuilt in faithful imitation of the old one, including the timber bonds The whole outside is ornamented with glazed tile patterns and string courses and battlements The colours used are dark blue, azure, and white, contrasted with the deep red of the finely-polished bricks The mosaics are not like those of later days, mere plain surfaces, but the patterns are raised from half an inch to two inches The tomb was built by the Emperor Tughlaq Shah (1340-1350) for himself, but given by his son Muhammad Tughlaq as a mausoleum for Rukn-ud-din

Farther on, to the right, is an *obelisk* about 50 ft. high, erected in memory of Vans-Agnew and Anderson. On a white tablet on the W face of the pedestal is an inscription which concludes with the words —

> The annexation of the Panjab to the Empire
> Was the result of the War,
> Of which their assassination
> Was the commencement

About ¾ m to the N W of the fort is the Idgah, erected by Nawab Abdus Samad Khan in 1770 (1148 A.H). It was restored to the Muslims in 1863

The **Tomb of Baha-ud-din Zakharia** ("The Ornament of the Faith"), commonly called **Baha-ul-Haq**, or Bhawal Haq, is as old as the reign of the Emperor Balban (1264-86). It was almost completely ruined during the siege of 1848 Some glazed tiles remain outside The lower part is a square; above this is an octagon half the height of the square, and above that a hemi-spherical dome. The son of **Bhawal Haq**, whose name was **Sadr-ud-din**, is buried in the same tomb. His cenotaph is adorned with green tiles Opposite, in the corner of the vestibule, is the tomb of Nawab Muzaffar Khan, the last Muslim governor of Multan (d 1818).

The **Tomb of Shams-i-Tabriz**, a celebrated Sufi martyr, murdered in 1247, stands ½ m. to the E of the fort on the high bank of the old bed of the Ravi. The tomb, rebuilt 1780, is a square surrounded by a veranda, with seven openings in each side. Above is an octagon, surmounted by a hemispherical dome, covered with glazed sky-blue tiles. The whole height is 62 ft To the left of the entrance is a small square building, dignified as the Imambara There are other shrines of martyrs in 1270

218 m. **Sher Shah** junction (D B), whence the Sind-Sagar Railway (p 366) branches off W and N , and crosses the Chenab, on a bridge of seventeen 200-ft girders (1890) carrying the road also.

234 m from Lahore *viâ* Chord line is **Lodhran** junction for the Sutlej Valley line from Kasur to Lodhran *viâ* Pak Pattan (p 347)

242 m. the **Adamwahan Bridge**, 4210 ft long (1878), reduced to 2105 ft (1927), carries the N.W. railway and road across the Sutlej River It was used to cross troops in the Second Afghan War

243 m **Bahawalpur** (D.B), is the chief town (called Baghdad-i-Jadid), and the capital of an Indian State with an area of 16,434 sq. m., with a river frontage of 300 m and a population predominantly Muslim.

The Nawab, Major H H. Al Haj Sir Sadiq Muhammad Khan Abbasi Bahadur, G.C I.E , K.C.S I., K.C.V O., LL.D. (born 1904), succeeded 1907 His Highness, invested with full powers in 1924, is by race a Daudputra (son of David), a descendant of Daud Khan of Shikarpur, Sind. His ancestors assumed independence of Afghan rule after the first expulsion of Shah Shuja from Kabul In 1842 Sir Charles Napier restored to Bhawal Khan, the then Nawab, the Districts of Sabzalkot and Bhaung Bara, lost to the State in 1807 In 1847-8 this Nawab assisted Herbert Edwardes during the Multan rebellion, for which he was rewarded with a life-pension, but died in 1852 His son, S'aadat Khan, was expelled by his elder brother, and died a refugee in British territory in 1862 In 1863 and 1865 rebellions broke out, but were crushed by the ninth Nawab, who died soon after

The town was built (*c.* 1780) by Bhawal Khan on an old site. The *Palace of the Nawab* is to the E At the side are underground rooms, where the thermometer remains at 70°, while it rises from 100° to 110° in the upper rooms An extensive view E can be obtained from the roof towards the *Desert of Bikaner*, which stretches for 100 m

251 m. **Samasata**, junction for the Southern Punjab line (1897) to Bhatinda (p 344) and Delhi: also for a loop S. to Bahawalnagar *viâ* Fort Abbas (68 m) By the canals flowing from the headworks at Islam (near Bakshan Khan stn. on this line) and Suleimanke (p 393) water is supplied to the desert tracts of the Bahawalpur State

Following the course of the Indus, through a very dusty tract, the railway, now in Sind, reaches

390 m. **Reti** station (R and railway R.H.). 4 m. S. are the vast ruins of *Vijnot*, a leading city before the Muslim conquest · there is nothing to be seen but debris The country now is subject to spills from the Sutlej and there are swarms of black partridge.

460 m **Rohri**, or Lohri, station (District Bungalow for Government Officers), alt 228 ft , is on E bank of the Indus, on limestone, interspersed with flints much quarried for railway ballast The houses, two and three storeys high, have flat roofs surrounded by balustrades The Sindhis have a peculiar head-dress. It is said to have been founded by Saiyad Rukn-ud-din Shah in A D 1297, more than 300 years after the Indus deserted a former bed at Alor for the Bhakkar pass The rocky site ends in a precipice 40 ft high, rising from the river-bank The Sukkur Barrage keeps the level high for 6 m. upstream Excellent dates are grown

The *Jami Masjid* is decorated with glazed porcelain tiles A Persian inscription records that it was built by Fateh Khan, an officer of the Emperor Akbar, about the year A D 1583. One of the relics is the *Mui Mubarak*, or "a hair of the Prophet," in amber, and preserved, in a gold tube adorned with rubies, in the War Mubarak (War, in Sindi = mui, Persian for hair), a building 25 ft. sq. on the N of the town, said to have been erected about 1545 by Mir Muhammad. The hair was brought from Constantinople by one Abdul Baki, whose descend-

ants have still the keeping of it. The present building, with its *striking green dome and painted* walls, was built by the Pir (Muslim saint) of Kingri The *'Idgah* was erected in 1593 A D by Mir Muhammad M'asum Near Rohri are forests, covering 90 sq m , which were planted in 1820 by the Talpur Amirs, now under the Sind Forest Department The wood is of little use except as fuel and is no longer used in railway engines

The E. **Nara Canal**, built by J. G. Fife (1858), used to run from Rohri due S through Khairpur, into the Thar and Parkar District It is now 525 m long, fed by the Lloyd Barrage lower down. The pala fish which used to run up the river are now stopped by the barrage

Excursion to Arore (**Aror**)—formerly the very ancient Alor [1] is only 5 m. distant to the E Alor was visited about 640 A D by the Chinese pilgrim Hiuen Tsang, who gave the picture of a Sind stretching from Kashmir to the sea with a capital at Alor under a Sudra monarch Thereafter a Brahmin, Chach, usurped the throne , and in 711 A D his son and successor, Dahir, was defeated by the invading Muslims under Muhammad-bin-Kasim At that time the Indus washed the walls of the city, but was diverted into its present channel by an earthquake in 962 A D

Once the road from Rohri crossed, by a bridge over 600 ft long, the ancient channel of the *Indus, but only a few stones show* where the bridge once stood The modern metalled road from Rohri does not pass through the village of Arore, which is on an elevation, but skirts its base A ridge of ruins runs N.E. One ruin bears *the name of 'Alamgir's Mosque.* Two of them are shrines, one to Shakarganj Shah, and the other to Kutb-ud-din Shah. To the first tomb people of the neighbouring villages still make pilgrimages It has no dome or building over it, but is a plain, white, neat tombstone, with a border of carved flowers Half a mile away is a Hindu shrine of Kalika Devi, where a light is kept burning day and night

From Rohri the Indus Valley railway (1878) crosses the Indus to Sukkur and Ruk Junction (p 405) and proceeds down the right bank , the direct line to Karachi (opened 1896) runs down the left bank of the Indus to

475 m **Khairpur Mir's**, built 1783, seat of the last Baluchi Amirs of Sind, the Talpurs, and capital of the Khairpur State The Mir, H H Faiz Muhammad Khan Talpur, was born in 1913 and succeeded in 1935 S of Nawabshah, at *Chauhu Daro*, a chalcolithic site was excavated in 1935

645 m. **Hyderabad** (Haidarabad) (D B), had a pop in 1941 of 127,521 It is situated (alt 84 ft) 2 m N of the Ganja hills, from which it is separated by an old course of the Indus This river now flows to the W of the city On the E is the Fuleli Canal, which used to leave the main stream 12 m. above the town, but is now supplied by a new cut which encircles Hyderabad hill on the N. From the earliest times the hill seems to have been occupied in part by a fort called " Neran," but no trace exists The modern city was laid out by Sarfaraz Khan, son of Ghulam Shah Kalhora, in 1782

[1] Alor, Uch, and Hyderabad are believed to have been the sites of three of many Alexandrias

A strong S.W. wind blowing at the end of April for forty days (Chalika) is caught by wind shoots.

The **Fort**, built 1782, is of a very irregular form, and about ¾ m. in circumference, in the centre is a large "burj," or a keep, with a water-tank, and a revolving beacon for aircraft The ditch has been filled in It was crossed by a bridge leading to one of these intricate gateways which have so often yielded to a "coup de main." The residences of the Talpur Mirs (1783-1843) have now almost disappeared In fact, since an explosion in the fort in 1906, very little remains but the tower Portions of Mir Nasir Khan's palace are kept up He became head of the Baluchis on the death of his brother, Mir Nur Mahomed Khan, in 1840, but was sent to Calcutta in 1843 and died 1846 Sir C Napier frequently resided in this palace, and in it he held his Grand Darbar on 24th and 25th May 1844, when every Chief in Sind submitted The painted Chamber is a protected monument In the recesses various historical subjects connected with the Kalhora family are delineated A picture in one recess represents an interview between one of the Amirs and an English officer in political uniform who is intended for Sir James Outram (Resident in 1842) An ascent to the circular tower gives a view of the surrounding country, with the Fuleli on one side, winding through the dusty plain, and the Kotri side of the Indus, with a buttress of rock, an offshoot of the Khirthar range, in the background.

The Kacheri (1912) consists of Revenue and Judicial offices Just S. of it, and overlooking the railway, is the tomb of Shah Makkai, a saint from Mecca, said to have come here in 1260. The battlemented mud wall round the tomb was built by Ghulam Shah Kalhora The main bazar runs for over a mile in a straight line from the fort gate to the new market

The tombs of the Kalhoras and Talpurs cover the N portion of the hill on which Hyderabad is built The tombs of the Talpurs are very beautiful, but not quite in such exquisite taste as that of **Ghulam Shah Kalhora**, deputy of the King of Kabul from 1762-72, the description of which may serve for all

On entering the enclosure by a small but richly-carved door the visitor is impressed by the beautiful symmetry of the mausoleum and the religious feeling displayed in the decorations, marble tomb, rich fresco paintings on the walls The dome fell and has been replaced by a flat roof The beautiful marble railing surrounding the tomb was shattered by the fall, and only the fragments of it remain Over one of the archways is an inscription in Persian, written by the order of his son Sarfaraz, whose tomb is in a burial-ground below the hill, and was built in 1785 A D.

There are four tombs of the Talpurs—that of Mir Karam Ali (1811-28), a domed rectangular building, with a turret at each corner, built in 1812, with marble fretwork, and roofed with coloured tiles; those of Mirs Murad Ali (1828-33), Nur Muhammad (1833-40), Nasir Khan, with white marble tombs inside; that of Mir Ghulam Shah and Fazl Ali, erected in 1855: and that of Mir Muhammad, built in 1857.

The **Cantonment** lies on a low ridge N W. of the town. Not far off is the church of St Thomas, built in 1860 to hold 600 per-

sons. It has several memorial windows, and on the N. side of the communion-table is a brass showing the number of officers and men who fell at Miani and Dabo (1843). The Roman Catholic church was built 1844

Hyderabad is famous for its embroideries, especially "Nats," the leather covers for the saddles of riding camels, in silk and gold, and its silver tissues. A few Baluchi Sirdars only now use them

In the Mirs' time there was a great demand for enamelling of their swords, matchlocks, and horse-trappings, which were profusely decorated with enamelled ornaments In enamelling on gold the colours red and crimson are chiefly used, and blue and green with silver

British political relations with the Amirs of Sind began in 1809, when the first Lord Minto concluded a treaty of "eternal friendship" with three of the Chiefs. A further treaty was made in 1832: but Shikarpur, Bukkur, and other places were seized in 1838, and in 1839 the Amirs were forced to acknowledge the suzerainty of the E. India Company On 15th February 1843, Major Outram was attacked in the Residency at Hyderabad, and two days later Sir C Napier from Sukkur defeated the Amirs at Miani

A memorial pillar has been erected in the old Cantonment near the river just S. of One Tree Bunder, 3 m. from Hyderabad, to commemorate the site of the Residency.

A visit can be made to the famous battlefields of Miani and Dabo, on which, in 1843, was decided the fate of Sind. The three places form a triangle, Miani being on the Fuleli 6 m. to the N W. of Hyderabad and Dabo 5½ m. to the E. (near the railway), where Napier defeated Mir Sher Mahomed Khan of Mirpur Khas.

On the E. side of the monument at Miani are the names of the officers who fell

A branch line (broad-gauge) and a motor road run S. to (62 m) *Badin*, on the edge of the Thar and Parkar Desert The Lloyd Barrage now irrigates a portion.

From Hyderabad the Jodhpur (metre-gauge) Ry. (opened 1900) runs by (55 m) Shadipalli to (309 m) Luni junction (p 210) with a branch to Khudro (N.) and a loop on the S At Mirpur Khas, 42 m E (by road also), is a stupa, 50 ft each way, with terra-cotta figures of Buddha

At Chhor (89 m E) a road runs (12 m S) to Umarkot, a mediæval Rajput fort, celebrated as the birthplace of Akbar In 1540 A D. the Emperor Humayun, after defeat by Sher Khan Sur of Ghor, fled to the desert, and obtained succour at Umarkot from the Rana He married Hamida Begum at Pat (p 406) on the Indus, and on his return to Umarkot the child who afterwards became the Emperor Akbar was born (23rd November 1542) The Sindi tradition is that Akbar was born under an "ak" bush (whence his name), and a stone to-day indicates the supposed site.

The main line now crosses the Indus, by a bridge of five spans of 350 ft. (1900), carrying a road also, to

650 m **Kotri** (D.B.) (loop-line to Rohri, p 404) The railway, opened as the Sind Ry in 1861, quits the Indus for Karachi, which lies some 50 m. N N.W. of its mouths. Kotri is connected with Karachi by a trunk road 120 m long.

702 m **Jangshahi** station (R). A good road runs 13 m. S.E. to **Tatta** on the Indus, and on the trunk road. On the Makli Hill (11 m) there is a D B. (no provisions procurable) Partridge, grouse and snipe found around Tatta the great Indian bustard on the plains; hog and deer in the Tatta forests

Tatta, now small, but as late as 1739 a great city of 60,000 inhabitants, first comes into notice as the seat of the Samma rulers of Lower Sind (1351-1517), who reached the zenith of their power in the reign of Nizam-u-din (1461-1509 A D), the Jam-Nindo still remembered by the people as the prince-hero of the Golden Age of Sind. The Samma rulers gave place to Arghuns (1519-1554) and Turkhans (1554-1625), invaders from the N. In 1555 a Portuguese fleet of 28 ships, under Pedro Baretto Rolim, arrived at Tatta, and, in the absence of the ruler in Upper Sind, sacked and burned the city and carried off much booty The last Turkhan died in 1625, and Jahangir annexed Lower Sind In 1739 the Empire collapsed beneath the onslaught of Nadir Shah, after whose death (1747) new Sindi dynasties arose with capitals farther N at Khudabad (near Dadu) and Hyderabad, and Tatta declined A British factory was allowed in 1758

The most remarkable sight in Tatta is the great mosque, begun by Shah Jahan in 1647 A D. and finished by Aurangzeb, though now much decayed The glory of ancient Tatta is on the Makli Hill, 2 m. N W This vast necropolis, covering an area of 6 sq miles, is said to contain 1,000,000 graves A few mausolea still survive

Immediately N of the steep incline which carries the road down the Eastern scarp of the hill, is the tomb of Mirza Jani Beg, the last of the Turkhan rulers It was built in 1599 A.D, and is of brick, the faces of which are glazed blue and blue-green.

Farther N rises the splendid mausoleum of Nawab Isa Khan, Mughal Governor of Sind, who died 1644 A D. It is built entirely of stone in the Fatehpur-Sikri style, richly decorated throughout with surface tracery It stands on a raised platform in the middle of a court, and is surrounded by a veranda on carved pillars, with an upper storey. Stairs on the E lead up to the roof.

A little distance to the E., on the very edge of the hill, is a low building of stone in the same style, containing the tombs of the ladies of the zenana of Nawab Isa Khan. The walls inside are covered with carving in low relief. The view from the Eastern doorway, across the intervening lake to the present town of Tatta, is beautiful.

Near the N W. corner of Nawab Isa Khan's tomb is that of Diwan Shurfa Khan, in whose lifetime it was built (1638 A D.) It is a massive square structure with heavy round towers at the corners, and is constructed of fine brickwork, pointed in the joints with strips of dark blue tiling. The dome was covered with blue glazed tiles, a portion only of which remains

1½ m farther N. along the crest of the hill is the tomb of the famous Nizam-u-din (Jam-Nindo) This is a square stone structure, which some have thought was built from the remains of a Hindu temple The W. façade is magnificently carved in a purely Hindu style Inside, the springing of the great arches to support a

dome, which was never built, affords an excellent example of the early attempts of Hindu craftsmen to arrive at the Saracenic arch by their own method of horizontally-laid stones The noble simplicity of the interior is in striking contrast with the Hindu richness of the W. façade

740 m. The Malir river bridge, length 1664 ft (1915), is severely tried occasionally by floods after cyclonic rains

753 m **KARACHI** (*Kurrachee*) Cantonment (or **Frere Street**) station * The **City** station is 2 m farther on towards the harbour

Through tickets by steamer lines to Karachi, *viâ* Bombay, 483 m. (P & O passengers change to B I S N. mail steamer in Bombay harbour), are issued at the same price as tickets to Bombay. There is a service by the B I S N. to Muscat, Bandar Abbas, Bushire, and Basra on the Persian Gulf

It has a large air port at Drigh Road, and a sea-plane base in the harbour An airship shed (1928), for the abandoned Empire service, has dimensions, 850 ft in length, 180 ft in breadth, and 170 ft in height, with a neon beacon

Karachi,[1] pop. (1941) 359,492, is the capital of Pakistan and the Sind Province, constituted 1936 The Governor is H E Shaikh Hidayatullah (1947)

It owes existence to the natural rock-bound haven formed by the S. extremity of the Khirthar mountains. It existed as a mere fort from 1725 to 1838, when it was yielded up by the Talpur Amirs to the British Sir Charles Napier first discerned the advantages of this natural harbour over the old capital of the Amirs at Hyderabad. It is a large seaport The Indus Flotilla used to run 50 m to the Indus mouths and took nearly three weeks to reach Sukkur, burning wood fuel.

N are the golf course, the Napier Barracks, and a block of buildings extending over the maidan N of the Lines is the **R.C. Church** (St Patrick)

Waterworks at Dumlotta are supplemented by a supply from Dadu (80 m).

W of Frere Street, leading from the railway station, is the **Frere Hall**, built in 1865 in honour of Sir Bartle Frere, Chief Commissioner (1850-59) The building contains a ballroom and public meeting-room, and the Karachi General Library In the grounds are two fine statues, one of the Queen-Empress Victoria, unveiled *by King George V., then Prince* of Wales, in 1906, and the other of King Edward VII., unveiled by Lord Willingdon, Governor of Bombay, in 1916 , close by stands the Baluchi Regiment Memorial, unveiled by the Prince of Wales in 1922 Around the Frere Hall are the Sind Club, Karachi Gymkana, etc

Old **Government House**, built by Sir C Napier, bought from him by Government, has been demolished for a Legislative Assembly Hall and Residence for the Governor E is **Trinity Church** (the garrison church), with its square campanile originally 150 ft high, but reduced in 1904 to 119 ft It was built at the instigation of Sir Bartle Frere, and contains a stained-glass window, put up in honour of Sir C. Napier and the victors of Miani. N is the Y M C A , farther N are St Andrew's Church (Scotch Kirk), and the Birch (Auxiliary Force) Club, and near by is the Empress Market

[1] A Guide Map (3rd Edition, 1944) is published.

The **Law Courts** were moved from McLeod Road to the Old Artillery Maidan (1906), and the Judicial Commissioners' Court became a Chief Court (1940) The **Victoria Museum** (1851) was removed (1928) to the **Burns Garden**

McLeod Road leads to the **General Post Office** and the **D. J. Sind College**. On the left is the Karachi **City** Railway Station The Chamber of Commerce, Banks, and Steamship Agencies are in this road The Indian city lies to the North of McLeod Road, between it and the Layari River, and is traversed by Bandar Road, which joins McLeod Road near the memorial clock-tower of Sir Wm Merewether

The Bunder Road runs N E to S E across the Chinna Creek to the Napier Mole fronting the Karachi Harbour Along or near it are the following buildings Y W C.A , Civil Hospital, C M S Mission and Church, G H Khalikdina Hall, Municipal offices (formerly in McLeod Road), Max Denso Hall, and the Port Trust Offices Housing schemes have populated the Eastern end of the road, and the Sind Textile Mills are situated here

2 m. along the Napier Mole is **Kiamari** (4 m. from the Cantonment), a *busy shipping port, with* its long line of wharves, connected with the Cantonment and Indian town by rail and tram Once this was an island At Kiamari the **Karachi Harbour** commences. It is a first-class harbour, begun by Sir Bartle Frere, designed by Mr Walker, commenced in 1854 and completed in 1883, since when additional railway facilities have constantly been added There is very good **sea-fishing** to be had in the harbour, which is famed for its fish and oysters

Near the Napier Mole, on the Chinna Creek, is the **Sind Boat Club-house** On the *Manora* headland, at the entrance to the harbour on the West, the **lighthouse** shows a fixed light 148 ft. above sea-level, visible 17 m in clear weather On the meridian of Karachi there is no land between Manora and the South Pole. Between the seaplane base and Marripur are two bathing resorts, Sandspit and the Lido Beach near West Wharf

Racing has become more frequent on the race-course S of Cant Station

Clifton, 3 m. S of the Cantonment, a favourite afternoon ride and drive, stands on the sea, and is approached by a good road. On Clifton Hill is the Jehangir Kothari Parade and Lady Lloyd Pier There is a fine sandy beach here extending S E. for miles; on which turtles in August, September, and October come up at night to lay their eggs, and turtle-turning is a pastime During the *cold weather the tanks and jhils* about Karachi swarm with small game birds, while in the Baluch Mountains, 25 m W of Manora, ibex, urial, panther, and bear are occasionally to be found In the Hab River, the boundary between India and Baluchistan (20 m from Karachi), mahsir fishing can be had during spates.

Magar Pir, 11 m. N. of Karachi, can be seen in an afternoon by a good motor road A Leper Asylum has been established here.

From the roots of a clump of date-trees a stream of hot water gushes out, the temperature of which is 133° On the W side of the valley is a temple surrounded by a thick grove and close to a swamp caused by the superfluous waters of the spring A tank surrounded by a 5-ft mud wall, contains crocodiles, which the Muslims in charge of the Pir's Tomb regard as sacred, and will kill goats for visitors who wish to see the crocodiles fed. The crocodiles are of the snub-nosed species, different from the long-snouted *gharial* of the Indus

Rohri (p 397) to Kotri by the loop-line on the right bank of the Indus

Opposite to Rohri, in the Indus, is the small *Island of Khwaja Khizr* Here is a mosque with an inscription, the last words of which, "Dargah-i-Ali," give the date 952 A D The shrine of Khizr, who was also called Zinda Pir, or "the living saint," is venerated by Hindus and Muslims alike.

A little to the S of the Isle of Khizr is the larger **Island of Bukkur.** It is a limestone rock of oval shape, 800 yds. long, 300 yds. wide and about 25 ft. high, commanding the river. The fortress has two gateways, one facing Rohri on the E, the other Sukkur on the W. As early as 1025 A.D. Abdur Razzak, Minister of Mahmud of Ghazni, expelled an Arab Governor from Bukkur. In the beginning of the 13th century it was an important fortress of Nasir-ud-din Kabachas.

In 1327 A D, Bukkur must have been a place of note, for Muhammad Tughlaq of Delhi sent persons of importance to command there Under the Samma Princes (p. 401) the fort changed hands, being sometimes under their rule and sometimes under that of Delhi During the reign of Shah Beg Argun the fortifications were rebuilt, the fort of Alor, 6 m. away, being destroyed to supply material In 1574 it was delivered up to Keshu Khan, an official of the Emperor Akbar. In 1736 it fell into the hands of the Kalhoras, and subsequently into those of the Afghans, who retained it till it was taken by Mir Rustam of Khairpur The Amirs attached much importance to this fort But on our advance to Kabul in 1838, it was placed on demand at the disposal of the British, and was used first as an arsenal, and then, until 1876, as a prison for Baluchi robbers

The Indus is crossed by the *Lansdowne Bridge*, erected (1889) on the cantilever principle, connecting Rohri with the Island of Bukkur, the line then crosses the island to Sukkur by another bridge of 290 ft span The great span between Rohri and Bukkur is 840 ft from centre to centre of the cantilevers, each cantilever is 320 ft. long, and the central girder connecting them is 200 ft long The roadway is 16 ft. wide in the clear A single line of railway is laid in the centre. A path 4½ ft wide for foot traffic is provided on each side.

3 m **Sukkur** station (R, D B, Circuit House, Canal Bungalow,

available, if not occupied, and railway R.H.), headquarters of the Sukkur District, standing on the right bank of the Indus. The heat is great but a breeze at night follows the river in the hottest season There are carriage and wagon shops of the North-Western Railway here. Low, bare limestone ridges slope down to the Indus, and on them is the official quarter, called **New Sukkur**, a cantonment built by Sir C Napier (1842)

There are tombs of Shah Khair-ud-din, a saint, built 1760, and Muhammad M'asum Shah Bakhri, Nawab of Sukkur, at the foot of a tower 90 ft. high, which he erected, and which overlooks the country for many miles The town was ceded to the Khairpur Amirs between 1809 and 1824 In 1833 Shah Shuja'a defeated the Talpurs here with a force raised at Shikarpur (p 407) in an attempt to recover Afghanistan, but he was himself defeated by Dost Muhammad near Kandahar

The **Lloyd Barrage**, 4725 ft long named after Sir George (the late Lord) Lloyd, then Governor of Bombay, is 2 m W. of New Sukkur It was begun in 1923 and opened by Lord Willingdon, the Viceroy, in January 1932 There is a colony here. The barrage, 46 spans of 60 ft. across the Indus, feeds seven main canals with a total length of 400 miles One canal is wider than the Suez or Panama Canals and much longer. It irrigates approximately 6 million acres, much of which was virgin land At the N end is a memorial to Gen. J. G. Fife, who first suggested its possibility

On an island rock in the Indus, commanding a good view of the Lansdowne Bridge, is the picturesque temple of Shri Sadbella, with a monastery of Udiasin Sannyasis, founded in 1823.

18 m. **Ruk** junction station (R.). From here the Quetta railway branches N. (see p 407) The loop, once the main line, opened in 1878, continues to

52 m. **Larkana** junction (D B), The country surrounding it is fertile and populous, and will benefit by the Sukkur Barrage. B G ry , N W to Jacobabad

66 m. **Dokri**. 8½ m E. by motor road from this station is **Mohenjo-daro** (66 m. S.W. from Sukkur in the Larkana district). Tongas available on application to the station-master at Dokri There is a R H available on application to the Custodian, who will issue a pass to the ruins and the Museum at the Archæological Camp Office at Mohenjo-daro for a fee of 2 annas only

Mohenjo-daro (the "Mound of the Dead") is a site of the Chalcolithic age, and like Harappa (p 393), representative of the "Indus" Civilisation It covers the remains of five or six successive cities The visible ruins cover about 250 acres, but the outlying parts of the ancient cities are hidden deep beneath alluvium, and water is near the surface

Near the north-west corner and surmounting the highest mound is a **Buddhist Stupa** of the time of the Kushan king Vasudeva I (182-220 A D) With this exception all the exposed buildings (1923-32) belong to the last three prehistoric cities and are referable to 2400 B.C or earlier

West of and close to the Buddhist Stupa is the **Great Tank** or **Bath**, which probably served for ablution purposes in connection with a temple It was 39 ft. long by 23 ft. wide, enclosed on three sides by a number of halls and chambers. A flight of steps, once paved with wood, led down into it at either end. In order to render the tank waterproof its brickwork was laid in gypsum mortar and

further protected by a backing of bitumen Near the S.W. corner is a drain for emptying or filling it After passing through an inspection chamber provided with a manhole, this drain flows into a 6-ft -high culvert furnished with a corbelled roof. To the N. of the tank and separated from it by a narrow lane is a double row of well - paved bathrooms ranged alongside a passage, down which runs an open drain Each room has its own staircase leading to the top, and is so planned as to secure complete privacy for its inmate.

The remains excavated at Mohenjo-daro are mainly residences and shops, the best examples of which are to be seen on the mounds to the east and south-east of the Buddhist Stupa north of the road to Dokri There are exposed a broad street and blocks of well-built houses, with stairways ascending to the upper floors, bathrooms, wells and underground drains In this part of the city are two square sewage tanks in the main street, one of which is provided with steps inside to facilitate its cleaning In the area to the S. of the Dokri road, the visitor should notice in particular the corbelled doorways and drain culverts, as well as the inclined water-chutes connecting with the street drains It is evident that the inhabitants of the place in the 3rd and 4th millennia B C had advanced ideas both of town-planning and of municipal administration Their commodious and well-planned houses bespeak a degree of luxury that was quite unknown at that period in Egypt and Western Asia

In the **Museum** (1925) is an interesting collection of antiquities from this site, including engraved seals, gold and silver jewellery, personal ornaments, implements, weapons, domestic utensils, sculptures, figurines, and painted potteries

94 m. **Sita Road** station Road, 7 m , to Pat, where in 1541-42 the Emperor Humayun was married to Hamida Begam, from which union the Emperor Akbar sprang (see p. 400)

116 m Dadu station 4 m S is an old capital, Khudabad of Khudayar Khan Kalhora

142 m **Sehwan** station (D B in the old fort), 117 ft above sea-level Sehwan is renowned through the N W border-land as the last resting place of the Saint Sheikh Usman Merwandi *alias* Kalandar Lal Shahbaz, a Persian, who died here in 1272 A D The tomb, surmounted by a dome and lantern, is adorned with beautiful encaustic tiles and Arabic inscriptions Mirza Jani Beg, of the Turkhan dynasty, built a still larger tomb to this saint, which was completed in 1639 A D by Nawab Dindar Khan. The gate and balustrade are of wood, encased in hammered silver, the gift of Mir Karam 'Ali Talpur, who also crowned the domes with silver spires A great fair is held in Sehwan annually on the 18th *Shaaban*, when Hindus and Muslims join in paying reverence at the shrine Sehwan was the capital of the Buddhist prince-ascetic, Bhartari Hari, brother of Vikramaditya Chandragupta II, the 3rd Gupta Emperor (375-413 A.D)

The town of Sehwan rises on a conical hill A deep valley separates it from a fort built on an artificial mound 60 ft high, and measuring at the top 1500 ft by 800 ft. No record has survived as to the origin of the fort.

The **Manchhar Lake** is not very far from Sehwan to the W ,

Bubak Road (8 m.) is the nearest rly station. It is a large natural depression, supplied with water by hill torrents and by Indus water, which reaches it by way of the W. Nara outfall and the Aral Canal It covers an area of 160 sq m. in the wet season, but shrinks very much. In the cold weather there is abundance of water-fowl shooting, and excellent snipe, quail, and partridge shooting round the edge of the lake, and an extraordinary number of fine fish

The fish used to be caught with spears, but usually an ingenious circular enclosure of nets, supported by poles, is laid down in the lake A flotilla of boats containing men with drums and noisy instruments surrounds the enclosure and gradually draws nearer The fish, frightened by the din, press nearer to the net Huge *dambhros* are seen flinging themselves into the air to jump over the lower net, but strike against the upper one and fall into the bag below Divers then go inside the net and examine it carefully under water, securing more fish *These men in their habits seem* almost amphibious

153 m from Rohri is **Tirth Laki** station (R), good quail, duck, and snipe shooting in the neighbourhood. The railway runs through the Laki Pass, at an elevation of 200 ft , the Indus lying below. This range of hills contains several hot springs, and shows many signs of volcanic action There are also lead, antimony, and copper in them

228 m from Rohri is **Kotri** junction (R) (p 400)

General Note on Sind

Shikaris and camels cannot be obtained without previous notice. It is advisable to invite the assistance of the Collector of the District. The railway runs through the following Districts —Sukkur, Larkana, Dadu, Nawab Shah, Hyderabad, and Karachi In nearly all parts of Sind there is good small-game shooting—duck, quail, snipe and black partridge—but the extension of canals has altered conditions of the days of inundation by the river

Reference may be made to *Sind : a Reinterpretation of The Unhappy Valley*, by J Abbott (Oxford Univ Press, 1924)

(*b*) Ruk Junction to Quetta and Chaman

Ruk junction station (R , D B), 15 m. on the Karachi side of Sukkur (see p 404) The first station of importance on the Sind-Pishin Railway, opened to Sibi in 1880, is

11 m **Shikarpur** station (D B Circuit House, Inspection Bungalow, and railway R H), a municipal town, founded 1617 The great road (16 marches to Dadur across a desert) to Kandahar and Central Asia passes through Shikarpur, which was long a great trade depot Although large banking firms are established here, the trade is done in Sukkur, the collapse of the rouble having affected Central Asia However, Shikarpuris still travel a great deal

The bazar is covered in on account of the heat in summer The old bazar has been lengthened, and the prolongation is called the *Stewart Ganj Market*, after a popular District officer A branch of the C M S at Quetta maintains a hospital for eye diseases There is a drainage system, which is unusual Shikarpur is connected with Sukkur by a tar-macadam

road, which continues 10 m. towards

37 m **Jacobabad** junction, N G Ry. for Kashmor, where there is a levee to control the Indus (D.B. ½ m). This was at one time the military frontier station The Cantonment was abandoned in 1914

The town was planned and laid out on the site of the village of Khangarh by General John Jacob, the distinguished Political Supt. and Commandant, Upper Sind Frontier (1847-1858), who built the Residency The upper storey was dismantled in 1879 The main porch contains a commemorative tablet A wonderful clock made by Jacob is still working, and he made a rifle (shown) He is buried here under a massive tomb When he arrived in Upper Sind the whole country about Khangarh was in a state of anarchy, bodies of mounted robbers —Bugtis, Dombkis, Burdis, or Marris—swept the plains and robbed and murdered those they encountered Khangarh itself offered a stout resistance to the 5th Bombay N I, but General Jacob's rule put an end to all these troubles Jacobabad is the headquarters of a civil district administered by the Deputy Commissioner, Upper Sind Frontier The temperatures at Jacobabad are in excess of any recorded in India, with an occasional reading of 127° Fahrenheit in the shade in the months of May and June. It is 190 ft. above sea-level

The railway across the Pat or desert was laid at high speed in 1879. The names of stations, *e.g.* Lindsay, Bellpat, record the engineers who took part and others. Trains run at night, and even so the heat may be trying in May and June

134 m. **Sibi** junction station (R, D.B.); alt. 433 ft. Headquarters of Political Agent, Sibi; from October to May. Horse and Cattle Show in February. This place is in the valley of the river Nari, near the entrance of the Bolan Pass. Sibi was occupied by the British in the name of Shah Shuja from Nov 1841 to Sept. 1842, the old fort being used as a commissariat depot It was ceded to the British by the Treaty of Gandamak in 1879. In the Victoria Memorial Hall *jirgas* are held

From *Sibi* there are two lines —the Northern, to *Harnai*, which has gradients of 1 in 40, and the Southern, Mushkaf-Bolan line to *Quetta*. In the winter 22° to 23° of frost is not at all uncommon on the higher parts of the line, whilst in summer 120° inside the house is not an unfrequent temperature at Nari It is scarcely necessary to say that the thickest clothing is necessary during a cold-weather tour

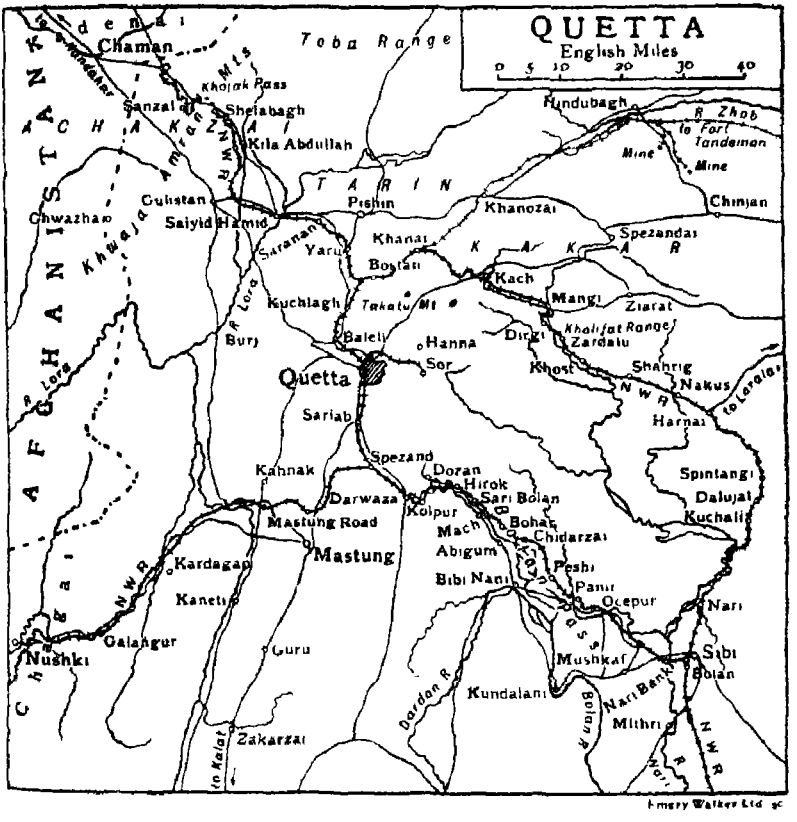
Sibi to Bostan and Chaman by the Mushkaf-Bolan Route

The original alignment of this railway along the Bolan bed (1882) was afterwards abandoned in favour of the present line, opened 1897 It rises 5440 ft to Kolpur and falls 375 ft. to Quetta Previously the march through the Bolan Pass (60 m) took 6 full days Bolan is said to mean "entrance of the Mundas" (prehistoric)

From **Mushkaf** (144 m) the line runs for 28 m. up the Mushkaf Valley with easy gradients. It then passes by the Panir Tunnel, 3000 ft long, into the upper Bolan There is a road also For 6 m. beyond the tunnel the works are exceptionally heavy, but from there up to **Mach** (181 m, 3250 ft.

—engine changing station) they are lighter: From Hirok (189 m.) they become very heavy again, and the Bolan is crossed nine times. Three engines are usually attached to a train from Abigum (m. 173)

At Quetta are the headquarters of the Hon the Resident and Chief Commissioner, Baluchistan. It is situated at the N. end of the Shal Valley, 100¼ m N of Kalat The Civil Station, with the Residency, the Club, the



206 m **Spezand**, junction for a railway over 83 m of desert to Nushki (see below) In 1918 the line was extended to Duzdap, now known as Zahidan, 510 m from Quetta, but terminates at Nokkundi (p 411) since 1931

222 m. **Quetta** (Shalkot) station (R., D B., 5508 ft above sea-level)

Sandeman Hall (in the City), designed by the late Sir Swinton Jacob, with a statue of Sir Hugh Barnes, the Sandeman Library, M'Mahon Museum, Town Hall, and the King Edward VII Memorial Sarai, lie E. of the railway, and beyond these is the city E of the city is the M'Mahon Park. To the N., on the farther side of the

Habib Nulla, are the Cantonments. To the N W stands the *mirs*, or fort, a former residence of the officials of His Highness the Wali of Kalat, whose predecessor permitted occupation in 1876 The **Staff College,** founded 1908, from Deolali, is on the road N E to the Hanna Valley

Quetta, commanding, with its outpost of *Baleh*, both the *Khojak* and *Bolan* passes, is a very important Indian frontier post. It contained, in 1931, 60,272 inhabitants, the numbers going up in the summer The casualties in the earthquake of 31st May 1935, with an epicentre near Mach, at 3 mins past 3 A M , were enormous (8884) The City, Residency, and Lytton Road suffered severely. A Memorial is at the junction of Gloucester and Phayre Roads. In winter the cold is very severe

Quetta was occupied by British troops in the first expedition in 1838-42 to Kabul By a Treaty of Jacobabad (1876) a British Political officer was again posted at Quetta (which was taken in lease in 1883), when a Governor-General's Agent for British Baluchistan, Sir R Sandeman, K C.S I (1835-92), was appointed He was buried at Las Bela In the Afghan campaigns of 1878-80 Quetta formed the base of operations for the Bombay column Another famous A G.G was Sir James Browne (1892-96), who built the Harnai Railway (1880) and was buried at Quetta

The line now proceeds up the Quetta Valley by Baleh and Kuchlagh to

242 m. **Bostan** junction for Khanai (see p. 411)

About 20 m beyond Bostan *junction the Lora River is passed*, the first stream on the Central Asian watershed

250 m **Yaru Karez**, the station for **Pishin**, on the road to Chaman (76 m) Since the opening of the railway to Chaman in 1892 the importance of Pishin, the principal place of the Achakzai-Kakar-Tarin country, has much decreased.

272 m **Gulistan** station It was intended, in 1887, to lay a short surface railway from here towards the Ghwazha Pass, an alternative route to Kandahar The main line turns due N to

281 m **Kila Abdullah** (R.)

291 m (from Ruk), **Shelabagh** is at the foot of the *Khojak Pass*, and near the S E end of the tunnel passing under the Khwaja Amran Mountains To the N is the Tabina plateau, attained by the Zaraband Pass This tunnel is about 2½ m long, on a heavy grade, and the atmosphere sometimes is bad Passing through it, we reach Sanzalla (R) and then, by a winding descent, the present ending of the line at

310 m **Chaman** station, alt 4817 ft

The Khojak Pass is surmounted by a military road also, and those who have the opportunity should ascend it (7200 ft) to see the view W. over the Kadanai Plain and N to beyond Kandahar, which is hidden by intervening hills

A railway to Kandahar must make a detour N to obtain length for the descent into the Kadani Valley, which lies far below

Chaman, and the distance to Kandahar, the Gandhára of ancient India and the Arachosia of Alexander, would be about 65 m

Quetta-Nushki Railway

The Quetta-Nushki B G branch from Spezand, 16 m. from Quetta, enters the Chagai District at Galangur, 61 m. from Spezand, and runs in a Westerly direction to Nushki, 83 m , thence to Dalbindin and Nok Kundi (219 m from Nushki). The distance is 221 m from Nok Kundi to Zahidan (Duzdap) in Persian territory

Nushki was leased from His Highness the Wali of Kalat in 1899 Trade converges at Nushki from Kharan and Shorawak, at Dalbandin from (*a*) Jalk and Mashkel, (*b*) Garmsel and the Eastern Helmand

Bostan to Kach

The scenery of this route, opened in 1887, is best seen by taking the route downward from Bostan, and should at any sacrifice of time be seen by daylight Leaving **Bostan** (R) the line, skirting the northern slopes of the Takatu Mountain on a gradually rising gradient, in one place forming a complete circle and passing over itself, runs to

Khanai junction, N G line for Hindubagh (46 m , chrome mines), and opened in 1929 to Fort Sandeman or Apozai (174 m.), in the Upper Zhob Valley, headquarters of a Political Agency , alt 4778 ft

Kach, 110 m from Sibi, 6357 ft. From here a good motor road goes (33 m.) to Ziarat (D.B), the headquarters of the Resident, Baluchistan, in the hot weather and of Sibi District from May to October, a valley 8000 ft. above the sea, set amongst hills clothed in juniper forests This place is entirely shut up in the winter, as it is subject to heavy snowfalls Fishing in the Kahan Tangi (10 m)

From Kach the line to Harnai has been dismantled after floods in July 1942

Mangi, 97 m From here a riding road goes to Ziarat (21 m E), traversing the narrow, deep defile of Mir Kásim Tangi

Immediately below Mangi the **Chappar Rift** is traversed. This is the shoulder of a mountain which has the appearance of being cracked from top to bottom through the solid mass of limestone, a common feature on the N W Frontier The Rift (m. 93-94) was crossed by the Louise Margaret Bridge (7 spans of 40 ft and 1 of 150 ft) at nearly 300 ft above the bed of the stream The line near the Rift ran through tunnels and across high bridges On leaving it a magnificent view is obtained of the Khalifat Range (11,440 ft) rising sheer out of the valley on the N W.

Harnai (R), 58 m from Sibi, motor road to Loralai (Bori ; alt 4700 ft) and Fort Sandeman (Apozai)

Nari (7 m). The line leaves the foot-hills and runs over a flat alluvial plain to Sibi (p 408)

ROUTE 20

SAHARANPUR by the Oudh and Rohilkhand Section of the E I Ry to Mughalsarai, through **Roorkee** to

(1) **Lhaksar** Junction for **Hardwar, Dehra Dun, Mussoorie, Landour** and **Chakrata**,

thence through **Moradabad** and **Rampur** to

(2) **Bareilly** Junction for **Kathgodam, Naini Tal, Almora,** and **Ranikhet**;

thence to LUCKNOW *and on to* **Benares** by (*a*) **Rae Bareli** and **Pertabgarh** (mail route) and (*b*) **Fyzabad, Ajodhya** and **Jaunpur**

Saharanpur junction (see p 331) is 50 m from Ambala Cantonment (p 332) and 111 m from Delhi *viâ* Ghaziabad and Meerut (Route 15). Saharanpur is the junction for the Oudh and Rohilkhand section of the E.I Railway, which runs S E to Lucknow (322 m) and (509 m.) to Benares and (520 m) to Mughalsarai, where it connects with the main and Grand Chord lines of the E I. Ry. to Calcutta (Route 2) The section to Moradabad was opened in 1886

A motor service (S) runs to Dehra Dun (p 414) in 2½ hours

22 m. from Saharanpur is **Roorkee** (*Rurki*) station (D B) It is 42 m by road to Dehra Dun, 65 m to Meerut, 32 m to Muzaffarnagar, 19 m to Hardwar Roorkee (depot of King George V 's Own Bengal Group Royal Indian Engineers) stands on an artificial ridge of canal spoil overlooking the Solani river. Up to 1845 a mud-built village, it is now the headquarters of the Ganges Canal workshops, established by Col Sir Probyn Cautley, K.C.B., the engineer in charge, in 1845-52 The *canal* (opened 1854 by Lord *Dalhousie*) *passes E. of the town* Besides the Solani aqueduct, 15 arches of 50 ft. span, the Dhanauri torrent crossing, Pathri and Ranipur super-passages between Roorkee and Hardwar, are objects of interest. Electric power is generated at the Falls.

The Thomason Civil Engineering College is named after James Thomason, Lieut.-Governor of the North-Western Provinces (who died at Bareilly in 1853), and was founded in 1847. The students are partly young officers of the Royal Indian Engineers, partly Anglo-Indians and Indians It has large laboratories. The library has more than 30,000 volumes available under certain restrictions to the public

m 30, bridge over the Solani River, 1748 ft long An aqueduct carries the Ganges Canal

33 m **Lhaksar** junction. A branch line from here (opened 1900) runs N. to **Hardwar** and **Dehra Dun,** giving access to the hill stations of Mussoorie, Landour and Chakrata

(1) *Lhaksar Jn. to Hardwar and Dehra Dun (for Mussoorie).*

17 m from Lhaksar, **Hardwar** or Amarut station (D.B.; height above sea-level 1024 ft) is situated on the right bank of the Ganges, at the southern base of the Siwalik range, at the mouth of a gorge. As the canal bank is closed by locked gates at intervals,

the key should be obtained from the canal office. The Ganges here divides into several channels between large islands, many of which are above high flood-water One of these channels commences about 2¼ m above Hardwar, and flows by it, and by Mayapur and Kankhal, rejoining the parent stream

The Ganges canal system commences at Hardwar, water being taken from between Mayapur and Kankhal on the right bank The Bhimgoda headworks control the supply of water The length of the weir is 2000 ft., divided into six bays of equal length It can pass a flood of 445,000 "cusecs" over the crest

The town is of great antiquity, and has borne many names. It was originally known as Kapila, or Gupila, from the sage Gupila, who passed a long period here in religious austerities at a spot still called Kapila Sthana.

The Chinese pilgrim Hiuen Tsang visited a city which he calls Mo-Yu-Lo, which General Cunningham identified with Mayapur, a little S of the modern Hardwar [1] Timur sacked the place in January 1399 The name Hardwar, "Door of Hari or Vishnu," probably does not date further back than A D 1400

The great object of attraction is the temple of *Daksheswara* (see below) and the adjoining bathing ghat This ghat, which is known as *Har-ke-charan*, has its name from the *charan* or footprint of Hari (Vishnu) impressed on a stone let into the upper wall, which is an object of great veneration at the annual gathering. Each pilgrim struggles to be first to plunge into the pool after the propitious moment has arrived, and stringent police regulations are required to prevent many fatalities In 1819, 430 persons lost their lives, and Government built the present enlarged ghat of 60 steps 100 ft wide. The cleansing from all sins is supposed to result from bathing in the Ganges here. The great assemblage of pilgrims takes place on the 1st of Baisakh (April-May), the day on which the Ganges is said to have first appeared, and when the Hindu solar year begins Photography should not be attempted

Every twelfth year, the planet Jupiter being in Aquarius and the sun entering Aries, a feast of peculiar sanctity occurs, called a *Kumbh-mela*, attended by enormous crowds This festival is held in turn with Allahabad (p. 47), Nasik (p 30), and Ujjain (p. 157), at intervals of three years Riots and bloody fights used to be common, in 1760, on the last day of bathing (10th April), the rival mobs of the Gosain and Bairagi sects had a battle, in which 18,000 are said to have perished. In 1795 the Sikh pilgrims slew 500 Gosains The *Kumbh-melas* now pass off quietly on the whole, although 500,000 may be present on the great bathing day elaborate railway, lighting, and sanitary arrangements are made The next takes place in April 1950.

Gangadwara is celebrated in the Puranas as the scene of Daksha's sacrifice, to which he neglected to invite Siva, the husband of his daughter Sati. Sati attended the sacrifice in spite of Siva's warning not to do so, and was so shocked at her father's disrespect that she went to the bank of the Ganges, and by her own splendour consumed her body Enraged at Sati's death, Siva produced Vira-Bhadra, who cut off Daksha's head and threw it in the fire. Siva restored Daksha to life, but as his head had been consumed, replaced it with that of a goat or

[1] For the ancient history of Hardwar, see *Archæol Rep.*, 2, 231.

ram. The spot where Daksha is supposed to have prepared his sacrifice is now marked by the *Temple of Daksheswara*, a form of Siva. It is at the S end of Kankhal, 2½ m. below the bathing ghat. Around the temple are several smaller ones of no interest.

There are three *old temples* at Hardwar—to Narayana-shila, to Maya-devi, and to Bhairava

The *Temple of Narayana-shila* is made of bricks, 9½ in square and 2½ in. thick, and is plastered on the outside. The *Temple of Maya-devi* General Cunningham thought to be 10th or 11th century Maya-devi is a three-headed and four-armed female in the act of killing a prostrate figure, in one hand is a discus, in another what resembles a human head, and in a third a trident. Close by is a squatting figure with eight arms, which must be Siva, and outside the temple is the bull Nandi Outside the *Temple of Sarvvanath* is a statue of Buddha under the Bodhi-tree accompanied by two standing and two flying figures On the pedestal is a wheel, with a lion on either side It is in the middle of the bazar.

From Hardwar many pilgrims proceed to visit the shrine of Kedarnath, a name of Siva, and that of Badrinath, far up in the Himalaya Mountains; also Rishi Kesh (14 m.), motors available Rishi Kesh is 6 m. from Rishi Kesh Stn (15 m.) on a short branch line from Hardwar. Aeroplane service to Pipalkoti in 1½ hours, weather permitting. To Lachman Jhula is a 2-m walk

49 m. from Lhaksar Dehra Dun (or Doon) is the headquarters of the Dehra Dun District and the railhead for Mussoorie. By road Dehra Dun is 58 m. to Chakrata (D.B.), 14 m. to Mussoorie, 31 m to Hardwar. At Kalsi, 32 m from Dehra Dun, on the Chakrata Road, near the D.B., on the right bank of the Jumna, is the Kalsi stone, inscribed with an edict of Asoka

Dehra is prettily situated in the midst of a mountain valley 2282 ft above sea-level. It was founded by Guru Ram Rai (below) His temple is on the pattern of the mausoleum of the Emperor Jahangir at Shahdara. Research is carried on at a Forest Institute (1914), an Agricultural Institute, and a Laboratory of the Archæological Chemist There are six Museums

In March 1922 the Prince of Wales' Royal Indian Military College was opened as a public school for Indians who desire a military career. The Indian Military Academy, opened by Sir Philip Chetwode on 10th December 1932, combines the functions of Woolwich and Sandhurst It accommodates Indian cadets, recruited from the ranks of the Indian Army or appointed after examination. A Banner was presented by the Marquess of Linlithgow (1937). Doon Court is a Viceregal residence. The place is also the headquarters of the Viceregal Bodyguard Dehra has a large community of Anglo-Indian and Indian pensioners *Lakshman Park* is the residence of His Holiness Shri Mahant Lakshman Das

In the earliest ages of Hindu legend Dehra Dun formed part of a region known as Kedarkhand, the abode of Siva, from whom also the Siwalik Hills are called. Here Rama and his brother are said to have done penance for killing Ravana, and the five Pandavas stopped on their way to the snowy range where they immolated themselves.

Authentic history begins in the 17th century, when Ram Rai was driven from the Punjab and the Sikh Gurushp on account of doubts as to his legitimacy In 1757 Najib-ud-daula, Governor of Saharanpur, occupied the Dun, but he died in 1770, when the country was swept by various invaders, last of all the Gurkhas. At the end of the Gurkha War, in 1815, the Treaty of Sagauli ceded the country to the British, who had easily occupied Dehra, and taken the strong hill fortress of Kalanga (5 m) after a gallant defence, in which Sir Rollo Gillespie (p 599) was killed, and is buried at Meerut There is a monument to the slain N E of the town Henry Lawrence was Superintendent in 1843

The approach to Mussoorie from Dehra is by way of Rajpur (7 m), a large village (3000 ft) The journey is made by motor-car to a point about two miles from the Mussoorie Library for Rs 10, road toll must be paid in addition Servants are conveyed by lorry road-toll at same rate is payable

At *Jharipani* there is water and a bazar, and here, at an elevation of 5000 ft., are the first houses of the European residents

4 m **Mussoorie** (alt 6570 ft) is situated upon an outer range of the Himalayas, which lie to the N of Dehra Dun. The hill rises in the form of a horse-shoe gradually ascending to the centre, and enclosing in the hollow a number of ridges. Ridges also run down from the back of the hill to the valley in which flows a tributary of the Jumna; between the ridges N and S. are deep, wooded gorges The S. view from Mussoorie is over the valley of the Dun and across the Siwalik Hills to the plains; the view towards the N. is bounded by the peaks of the snowy Chor range with the Bhandarpoonah peak The hills, on the side nearest the plains exposed to the prevailing winds, are nearly bare To the N., however, not far below the ridge, trees are plentiful. They are principally oak, rhododendron, and fir In sheltered places apricots, apples, pears, and cherries flourish, together with many English annual and perennial plants. Mussoorie is much frequented by non-official Europeans and has become very popular with Indians. The first hydro-electric station was installed in 1909

The Anglican church was founded by Bishop Daniel Wilson, on a tour, 1835-37, and of numerous schools, one existed in 1837 Wynberg Homes for the Anglo-Indian community were started in 1893

Landour is a little to the E. of Mussoorie, connected with it by a narrow spur 200 yds long and from 20 yds to 30 yds. in breadth, with a precipice of from 80 ft. to 100 ft. on either side Landour Hill is about 900 ft above the average of the Mussoorie ridge The houses and barracks are built upon the ascending slope of the spur and upon the precipitous slopes of the ridge. The barracks, which serve as a convalescent depot for the families of British troops, face the S.

There is a good road from Mussoorie (148 m) to Simla *vid* **Chakrata**, a military hill station 7000 ft above the sea, in the centre of the tract called **Jaunsar Bawar** (21 m) There are forest

R.Hs. at most halts, but tents, food, and servants should be taken (see p 327). The number of marches is twelve. The highest point crossed is the Patemalla Mountain (9368 ft), 33 m from Simla. Motor car (4 seats) can be hired for journey from Dehra Dun to Chakrata (58 m).

Main Line from Lhaksar Jn to Bareilly Jn

37 m from Saharanpur is the Banganga River, with a bridge 1295 ft long (1887), and at 43 m. the Ganges bridge of 2886 ft (1887)

59 m. from Saharanpur, on the main line, is Najibabad, founded by Najib-ud-daula, a Rohilla chief of Saharanpur, with a citadel of Pathargarh, destroyed in 1858. Branch to *Gajroula* (66 m.), and another to *Kotdwara* (15 m. D B), whence by road (26 m.) to the military hill station (5828 ft.) of *Lansdowne* (D B), which is garrisoned by Garhwal Rifles Motor services by lorry (S) in 3 hours daily from Kotdwara

73 m **Nagina** station (D B.), noted for its work in ebony It is 19 m from Bijnor (D.B.K) Motor lorries and ekkas are generally available **Bijnor** is 3 m. from the Ganges and on the Gajraula branch railway The Brahmanical threads (*janeo*) made here have acquired a general reputation

120 m. from Saharanpur is **Moradabad** junction (W rooms, good D B, 2 m) Branch lines of the E I. Ry.. (*a*) 100 m, to Delhi, *vid* Hapur (junction for Meerut (p. 329), and Ghaziabad, crossing the Ganges at Garhmuktesar, with temples of Mukandnath and Bhairav; (*b*) 28 m., on the old main line, opened 1873, to Chandausi jn. for the line (61 m.) from Bareilly jn. to Aligarh jn.

The Rohilkhand and Kumaon Rly (metre-gauge) runs (48 m.) to Ramnagar (jn at Kashipur for Lalkua on the Bareilly-Kathgodam branch of the same ry), also to Sambhal (below). The ry stn lies to the S E of the city (pop 1941, 142,414), which is on the right bank of the Ramganga river To N W of the city is the civil station The city is noted for its metal work, especially for inlaid work of brass and tin.

About ½ m N of the railway station is the *American Church*, and 1 m. from this church the Ramganga river is crossed by the railway and by a bridge of boats, except in the rainy season. To the W. is the Jami Masjid, dating from 1634, in the reign of Shah Jahan, after whose son, Murad Bakhsh, the place was named N. are the ruins of the fort of Rustam Khan, a Rohilla, who founded the city in 1625. In 1715 Nizam ul Mulk was governor.

On the outbreak of the Mutiny the Judge of Moradabad, Mr Cracroft Wilson, and the Collector, Mr C B Saunders, afterwards Commissioner of Delhi, maintained themselves till 3rd June, but were then obliged to fall back on Meerut The city was recovered on 26th April 1858

The road from Moradabad N.E. towards Naini Tal is only metalled up to the 22nd m., where it crosses the river Kosi by a ferry or bridge of boats, and beyond is not fit for motors. Another road runs 73 m. to Meerut. The mosque at **Sambhal** (22 m. S. by road) bears an inscription which states that it was built by the Emperor Babar, but this is doubtful. It is claimed by the Hindus as a shrine of

Vishnu, but it is a specimen of early Pathan architecture. Babar's son Humayun, afterwards Emperor, was governor of the place, which was plundered by the Mahrattas under Tukaji Holkar in 1773

On leaving Moradabad the Ramganga river is crossed by a bridge (carrying the road also), 2126 ft long (1894)

At m 135 the Kosi river bridge (for road also) is 1083 ft long (1894).

137 m from Saharanpur, on a chord line, opened 1894, **Rampur,** or Mustafabad (D B K), the capital of a Rohilla State (see below, under Bareilly, for history) The Chief, Major H H Nawab Saiyid Raza Ali Khan Bahadur, G C.I E, born in 1906, succeeded his father, Nawab Sir Hamid Ali Khan, in June 1930 There is a fine Guest-house The State **Library** is famous for its Oriental MSS, it contains also a remarkable collection of portraits of the 16th to 18th centuries, which includes one of François Bernier and a contemporary one of the Emperor Babar. Among the principal treasures is a little volume of Turki verse with autograph notes by Babar and Shah Jahan

176 m from Saharanpur is **Bareilly** junction (R, D B.) (pop 1941, 192,688, alt 562 ft) The R and K Rly (metre-gauge) runs N to (66 m) *Kathgodam*, under Naini Tal (see p 419) W from Bareilly the R and K Ry runs to Budaon and, crossing the Ganges by a bridge 2140 ft long (1906), to Kasganj (jn for B B C I. Ry metre-gauge line from Cawnpore to Agra). A branch, the old main line (1873), connects, *viâ* Chandausi, with Aligarh (p. 427), crossing the Ganges at Narora by a bridge 3040 ft long (1874) Below the bridge are the headworks of the Lower Ganges Canal, irrigating down to Allahabad

By road Bareilly is 63 m. to Kathgodam, 47 m. to Shahjahanpur, 52 m. on to Sitapur, and 52 m. farther on to Lucknow; it is 33½ m to Pilibhit, 128 m to Muttra, 132 m to Agra Accumulators can be charged at the R and K Railway Electric Power-house, near the city station, or, occasionally in the daytime, at the Civil Lines or Cantonment Electric Light Stations

Bareilly is the capital of Rohilkhand Two Afghan brothers, Shah Alam and Husain Khan, settled here in 1623 Ali Muhammad Khan, grandson of Shad Alam, united the Rohillas between 1707 and 1720, made Bareilly his headquarters, and Hafiz Rahmat Khan, who succeeded him, extended his power from Almora in the N to Etawah in the S W. On the death of Najib ud daula in 1770, the Rohillas provoked an invasion of the Mahrattas, and executed a promise to pay the Nawab Wazir of Oudh, who obtained British assistance in keeping the Mahrattas out As the Rohillas, except Rahmat Khan, omitted to pay, the Rohilla War, 1773-74, ensued, in which the ruler of Oudh, again with the support of British troops, conquered Rohilkhand, Hafiz Rahmat being killed, the 23rd April 1774,[1] at Miranpur Katra, 15 m., on the line to Shahjahanpur Faiz Ullah, son of Ali Muhammad Khan, was recognised by the Wazir as Chief by a Treaty of Laldhang (1774), and from him the present Chief of the Rampur State is descended. Bareilly was ceded to the British by Saadatali Khan in 1801, to cancel a debt accruing by the loan of British troops.

[1] A narrative of the Rohilla War, may be read in Sir John Strachey's *Hastings and the Rohilla War* (Clarendon Press, 1892).

On the outbreak of the Mutiny in 1857 the garrison revolted on 31st May, shortly after the arrival of fugitives from Ferozepore (p. 346), and marched to Delhi The few Europeans who remained were afterwards massacred The English under Sir Colin Campbell retook Bareilly on 7th May 1858, when all the insurgent leaders fled with Khan Bahadur Khan, grandson of Hafiz Rahmat, into Oudh

Bareilly contains a mosque of Shaikh Ahmad Khandan with a Persian inscription (1284 A D.) of Balban, and another, the Mirzai, dating back to Shah Jahan. The splendid rows of Bamboos, from which it is commonly called Bans Bareilly, have practically all disappeared In the churchyard of the station church is the tomb of Mr Thomason, Lieut -Governor of the North-West Provinces, 1843-1853, to whom the present systems of land revenue and administration of N India are due. At Aulah were palaces of the Rohillas

Bareilly has rosin, bobbin, catechu and match factories at Clutterbuckganj The old industry of lacquered and gilt furniture has been replaced by woodwork and furniture making, which has received an impetus by Government help The sugar industry expands rapidly Cotton rope, newar, tents, and durries are also made There is one college of the first rank here and its history dates back a hundred years to the time when it started as a school There are six high schools and three middle schools for boys, and a Government girls' high school, the first of its kind in the U.P A juvenile jail and a mental hospital (besides the central prison and district jail) are features of the place

(2) *Bareilly Jn to Bhojeepura (for Sitapur) and Kathgodam (for Naini Tal)*

12 m from Bareilly Jn , on the R and K. Ry (opened 1884), is **Bhojeepura** junction for Kathgodam (see below) The main R K line runs N E from here to 36 m Pilibhit, then turns S E to (115 m.) Lakhimpur, (144 m) Sitapur, and (199 m) Lucknow At Mailani (78 m from Bareilly) a branch crosses the Sarda River

A branch line runs from Pilibhit to, 38 m , Tanakpur on the Nepalese frontier At Banbassa, 33 m from Pilibhit, are the head works of the Sarda Canal, built by Sir Bernard Darley The Sarda joins the Gogra 25 m. upstream of the former junction at Rampur Mathra with the Sarju river The canal irrigates the Gogra-Ganges Doab A barrage of thirty-four bays, each of 50-ft span, has been built across the river 4000 m of canal and distributing channels, will irrigate in a dry year over 2000 sq miles, of which one-fifth is under sugar-cane The works took eight years to complete, and were opened on 11th December 1928

Sitapur (D B.) was a small military station Good roads to Lucknow, Shahjahanpur and Lakhimpur (Kheri Dt) The troops here mutinied on 3rd June 1857 Those Europeans who escaped wandered for four months in the jungles, the few who remained were protected by the Janwar Zamindars

of Ramkot, and ultimately sent to the Kaisarbagh in Lucknow (p 452). The station was remodelled in 1859 The district has a large sugar industry with three model mills

66 m from Bareilly, and 241 m from Lucknow, is **Kathgodam** (R) terminus By road it is 63 m from Bareilly to Kathgodam, and on to Naini Tal the distance is 22 m Motor services (Vaughan's Transport, all classes) from Kathgodam to Naini Tal, and thence to Ranikhet and Almora

The country is flat as far as *Ramlbagh* (2 m, D B) The road then ascends the valley of the Balaya, amidst picturesque scenery, with waterfalls flowing down deep ravines, to (12 m) *The Brewery* From here Naini Tal may be reached by a steep bridle-path, fit only for ponies or "dandies" About 1 m. below *The Brewery*, however, a motor road takes off on the left, reaching Naini Tal (Talli Tal) in 10 m

Naini Tal (D B), alt 6346 ft, founded 1841, the summer residence of the Governor, United Provinces, is extremely picturesque, the lake forming a most striking feature The highest peaks are to the N W — China is 8568 ft above sea-level, Deopatta, 7589 ft, and Alma, 7752 ft

The *Lake* is nearly 1 m long and 400 yds. broad, with an area of 120 acres. The flood-level is 6410 ft above the sea. The depth ranges from 5 fathoms at the N. end to 15½ in the broadest part, and there are *Sulphur Springs* at the Talli Tal (S.) end There is a Yacht Club and Boat Club.

The principal residences lie to the N W of the lake, close to the shore the Capitol Cinema, the Club about ½ m farther (quarters for men), and the Secretariat A Guide Map is available. Polo, cricket, football, and hockey are played on the "Flats" There are numerous *Educational Institutions*, St Joseph's College is the largest

The *Church of St John in the Wilderness*, ¼ m S W of the Club, is built of stone. It has a roof of dark-coloured wood, and has two stained-glass windows There is a handsome brass under the window on the N. side of the communion-table, in memory of Cudbert Bensley Thornhill, C S I

On 18th September 1880 a catastrophe occurred at Naini Tal On Thursday, the 16th, rain fell in torrents, and continued during Friday and Saturday, in which two days 33 in had fallen The Victoria Hotel, which stood about 280 yds to the N of the N corner of the lake, had a lofty hill at its back At ten o'clock on the morning of Saturday, the 18th, a slight landslip crushed in the outhouses and a portion of the rear of the premises, and buried several Indians and one European child The Assistant-Commissioner, Mr Leonard Taylor, came at once and sent for the military, to extricate the dead and wounded At 1 30 P M the cliff overhanging the spot fell, burying at once the hotel, the soldiers, the assembly rooms and library It was utterly impossible to extricate any of those entombed.

There is a pretty ride on the W side of the lake, where the visitor may ascend to a considerable height. But the finest views will be obtained on the E. side—*e g* from Sher ka Danda (7886 ft.) or Larya Kanta (8140 ft) An annual Kumaoni gala (July) commemorates former Chand rulers

An excursion may also be made by a very pretty path from Naini Tal to **Bhim Tal**, 12 m (bungalow and fishing), to **Naukuchia Tal**, 2 or 3 m. from Bhim Tal (camping ground and fishing), and to **Malwa Tal**, 10 m from Bhim Tal over the hills, a very pretty lake (bungalow; fishing and good shooting on a permit) From Bhim Tal it is possible to return direct to **Kathgodam** (9 m) by a bridle-path Another bridle-path leads (4 m) to Bhawali, a growing resort, on the motor road, 22 m from Kathgodam.

The stages on the round route to **Ranikhet** and **Almora** are given below the direct route from Kathgodam is by Bhim Tal There is a motor road from Naini Tal *vid* Ranikhet to Almora

The distances by motor road are: Naini Tal N to Ranikhet, 49 m, Ranikhet E to Almora, 29 m, Ranikhet S W to Ramnagar, 61 m These roads can all be used by motors, but on the last named, 7 m near Ramnagar (1500 ft), are not good, some of the bends are sharp The gradient is 1 in 20, but is sometimes steeper, no regular bus service

Nos	Names of Stages	Miles from Stage to Stage
1	From Naini Tal to Khairna D B	12
2	From Khairna to Ranikhet D B.	25
3	From Ranikhet to Majhkali D B	8
4	From Majhkali to Almora D B	16
5	From Almora to Peora D B	10
6	From Peora to Ramgarh D B	10
7	From Ramgarh to Naini Tal	13
	Total	84

At **Khairna**, on the Kosi River, is mahsir fishing, also gooral shooting, and a few leopards in the hills. From Khairna to Almora by the river is rough going.

Ranikhet (D B K), with Chaubattia, an important military hill station Elevation 6000-7000 ft The views of the Himalaya snows from this station are very grand Nanda Devi (25,645 ft), 60 m distant, has twin peaks

Almora (D B and boarding-houses), chief town of the District, 5400 ft above sea-level Almora, old capital of Kumaon, was taken in the Gurkha War of 1815 and ceded by Nepal It is resorted to by persons with weak lungs An All-India Cultural Centre (1939) is on Simtola Hill In the neighbourhood are *fruit orchards* supported by Dartington Hall in Devonshire The Chowka river is the boundary with Nepal

Almora to *Pindari Glacier* (13,000 ft), eight marches (D B on the way, but no attendance. Eggs and vegetables usually obtainable) Best time of year, May or early October. Travellers should make arrangements with the Dy-Commissioner, Almora, for conveyance and carriers

Main Line from Bareilly Jn to Lucknow and Mughalsarai, opened 1874

At m 203, **Miranpur Katra** (p 417), a battlefield in 1774

At m. 220 the Garra River is crossed by a bridge 1600 ft. long (1873) to **Shahjahanpur** junction (D B K in Cantonment). Railways (1) to Pilibhit, 52 m on the Rohilkhand-Kumaun line, and (2) to Sitapur, 36 m on the O. and R Section of the E I. Ry Motor-bus services (S) to Pawayan, 17 m. N E Fatehgarh is 48 m, S.W., by road.

Shahjahanpur is the chief town of a District (pop. in 1941, 110,163). The Cantonment is now occupied by the Army Clothing Factory The principal local manufacture is sugar The Rosa Sugar factory and rum distillery is situated on the Garra River, a few m from the city, with which it is connected by railway (for goods traffic only) Excellent silk cloth is produced in the city Good duck shooting in the district, the forests in the N are full of spotted deer To Miranpur Katra (p 420) is 19 m W by road At Shahabad (17 m on the Lucknow road) a Treaty was signed, on 17th June 1772, which led to the Rohilla War (see Bareilly)

In 1857 the Europeans were attacked while at morning service on 31st May, but defended themselves in the church with the aid of some faithful sepoys, and fell back on Muhamdi, 20 m E , where, however, they were all murdered The city was recovered in October 1858.

260 m. **Hardoi** station (R , D B) Good duck-shooting in winter months in Hardoi Dt

322 m **LUCKNOW** junction (R) (Route 22) Branch, 45 m to Cawnpore (p 431) on the E I R main line from Delhi to Calcutta

From Lucknow two lines run to Benares , the direct route (187 m) by Rae Bareli (opened 1898), which is 371 m from Saharanpur, and Pertabgarh, which is 430 m from Saharanpur , and the older and longer (209 m), by Fyzabad, 80 m from Lucknow, and Jaunpur, 165 m (opened 1874)

(*a*) On the direct route,

371 m from Saharanpur, **Rae Bareli** (D.B K.), junction for branches to Allahabad and to Unao, is the headquarters of an Oudh District (1856) The name comes from the once important tribe of Bhars It contains an old fort of Ibrahim Sharqi of Jaunpur (1401-40)

430 m from Saharanpur, **Partabgarh** (D B K), headquarters of a district The E I Ry line, from Fyzabad Jn through Sultanpur on the Gumti river to Allahabad Jn., runs through Partabgarh

463 m **Janghai**, jn with the branch line from Jaunpur (p 423) to Allahabad

(*b*) By the longer route,

18 m from Lucknow is **Bara Banki** Jn (D B K) The B N.W Rly branch (metre-gauge) from Lucknow (Aishbagh), which has been running alongside, here diverges to Chaukaghat on the Gogra From Gonda Jn. (D B K) 31 m beyond the Gogra, two branches turn N , one to (38 m) **Bahraich**, Nanpara (branch for Katarnian Ghat, on the Gogra river), and a loop to **Balrampur** (D B), Uska Bazar (D B), and **Gorakhpur**, 136 m. (p 465)

In **Bahraich** (D B K) is the tomb shrine of Syad Salar Masud, nephew of the great Mahmud of Ghazni, who was killed here in 1033 A D The shrine is about a mile N from the ry station and about 2 m from the town.

Saheth Maheth, on the borders of the Bahraich and Gonda Districts, marks the site of the ancient city of Sravasti and the famous Buddhist convent of the Jetavana, where the Buddha is said to have lived and preached for twenty-five years The antiquities excavated are preserved in the Lucknow Museum The place can best be visited by riding an elephant from **Balrampur** (18 m. from Gonda), on the Rapti river and residence of the leading talukdar of Oudh An ancestor, Maharaja Sir Drigbijai Singh, K C S I., was one of five loyal talukdars during the Mutiny and received large additions to his estates as a reward.

80 m from Lucknow is **Fyzabad** junction (R., D.B.). Connection is made with Partabgarh, on the main line, by a branch running through to Allahabad.

Fyzabad (old name Bungle) is the headquarters of a District. Once the capital of Oudh, the city has fallen into decay since the death, in 1816, of Bahu Begam (below). The first Nawab of Oudh, S'aadat Khan (1724-1739), seldom resided at Fyzabad, though it was his nominal capital, so also his successor, Safdar Jang (1739-53), but Shuja-ud-daula (1753-75), who succeeded, took up his permanent residence here. When defeated at Buxar (p. 60) in 1764 he fled to Fyzabad, and constructed "Fort Calcutta," with ramparts, 60 ft. thick, of rammed clay, over the Gogra. At his death, in 1775, his widow, the Bahu Begam, remained at Fyzabad, while Asaf-ud-daula, the next Nawab, removed to Lucknow.

The city is bounded to the N. by the Gogra river, which here divides into two streams, both crossed by pontoon bridges. The **Cantonment** lies to the N.W. of the Indian city, at the S.W. corner of which the railway to Benares passes.

The **Mausoleum of the Bahu Begam**, widow of Shuja-ud-daula, Nawab of Oudh, and mother of Asaf-ud-daula, is the finest mausoleum in the Province. The cenotaph is of marble, without inscription. The total height may be taken at 140 ft. The lady was one of the two Begams of Oudh whose alleged ill-treatment formed a subject of indictment of Warren Hastings on which Burke and Sheridan wasted oratory. Although Asaf-ud-daula and the British officials acting with him did put considerable pressure on the servants of the two Begams (the mother of Shuja-ud-daula was known as the Mani Begam) to compel them to disclose where the State money, retained by the ladies, was hid, the ladies themselves were untouched. They received their jagirs again in 1784, and wrote letters of condolence to Warren Hastings on his trial!

The **Mausoleum of Shuja-ud-daula** (known as the Gulab Bari), close by, is something like the Begam's. At each of the four corners of the building were oblong and square reservoirs, now filled in. In the centre space on the ground floor are three tombstones without inscription. The middle slab is that of Shuja-ud-daula. His mother's is to the W., and that of his father, Mansur 'Ali, to the E. In the W. side of the enclosure is a mosque at the N. end, with an Imambara on the S. The Civil Station, Cantonments and environs are well wooded with tamarind, mango, and other trees.

In the **Guptar Park** is a Museum (1871) and Library. At the S. end is a temple where Rama is said to have disappeared. The word Gupt means disappearance.

By road Fyzabad is 79 m. to Gorakhpur, 29 m. to Gonda, 38 m. to Utraula. Petrol obtainable from Messrs. Abdul Qayum *& Co.*, *also from* Oudh Electric Motors, on the main road to Ajodhya, also from Motor Stores on the Allahabad road.

84 m. **Ajodhya** station (Sanskrit *Ayodhya*), on the banks of the Gogra, is the place where the great Ram Chandra once reigned, and ranks as one of the seven sacred Hindu shrines. The ancient city is said to have covered an area of 48 kos, or 96 m., and to have been the capital of Koshala, the country of the Solar race of Kings, of whom Manu was the first. A

copper grant of Jai Chand, the last of the Kanauj Rathors, dated 1187 A.D., was discovered near Fyzabad The Chinese traveller Hiuen Tsang found at Ajodhya twenty Buddhist monasteries with 3000 monks. According to him, the celebrated Toothbrush-tree of Buddha grew here

The road from Fyzabad Cantonment to Ajodhya (4 m) is fair and may be found more convenient than the railway On entering Ajodhya the **Hanumangarhi Temple** will be found on the left In the sanctum, the doors of which have silver frames, are images of Sita and Hanuman The latter has a gleaming jewel of large size, which looks like a light-coloured sapphire The temple is an oblong of about 200 ft by 150 ft The walls are 45 ft high, and seem strong enough for a fortress, which justifies its name of *Hanuman Garhi* ("Hanuman's Fortress") The town swarms with red monkeys

To the N.W. is the temple of **Kanak Bhawan**, or Sone Ka Garh, with images of Sita and Rama crowned with gold, whence the name "Palace of Gold," supposed to have belonged to Rama's stepmother, Maharani Kakai

The Janam Sthan, or place where Ram Chandra was born, is ¼ m W of the Hanuman Garhi, it is a plain masonry platform, just outside a temple, but within the outer enclosure on the left-hand side The primeval temple perished, but was rebuilt, and was converted by Babar into a mosque Europeans are expected to take off their shoes if they enter the inner gate, leading to the mosque, which is in the inner enclosure and contains twelve black pillars taken from the old temple On the pillar on the left of the door on entering may be seen the remains of a figure. In the corridor between the two enclosures is the Rasoi, the kitchen where Ram Chandra's food was cooked. During communal rioting in 1934 the Hindus damaged the mosque, which was repaired at their cost.

At about ¼ m to the N of the Babari mosque is **Swarga Dwara**, or Ram Ghat, where Rama was cremated. S W. is **Lakshman's Ghat**, where Lakshman, the half-brother of Rama, used to bathe. 1 m. to the S of Hanuman Garhi is the *Mani Parbat*, and to its S. again are the *Kuver Parbat* and *Sugriv Parbat*, mounds of great antiquity. The **Mani Parbat** Hill is 65 ft high, and is covered with broken bricks and blocks of masonry The bricks are 11 in. square and 3 in thick. At 46 ft above the ground, on the W side, are the remains of a curved wall faced with *kankar* blocks General Cunningham supposed that the great monastery, described by Hiuen Tsang, is the **Sugriv Parbat**, which is 560 ft long by 300 ft. broad, and that the Mani Parbat is the Stupa of Asoka, built on the spot where Buddha preached the law during his six years' residence at Saketa

Ajodhya is connected with Lakarmandi Ghat (station on B and N W R, across the Gogra) by steamer service in the rains and a pontoon bridge at other times

165 m. from Lucknow is **JAUNPUR City** (R., D B.K 2 m. from E I R Ry Stn) *There are two* stations—the E I. Ry and the B and N W Ry.—at Jaunpur. the Civil Lines, or Zafarabad station, is 4 m farther on. Branch lines run (1) on the E I R., 71 m to Allahabad (jn at Janghai, 34 m. for the main line from Partabgarh to Benares), (2) on the B and N W Ry line to, 37 m, Aunrihar jn and thence to **Ghazipur** (p 464) and Bihar. By road Jaunpur is 36

m. from Benares, 57 m. from Allahabad, 46 m. from Mirzapur station The town is celebrated for the manufacture of perfumes

Jaunpur,[1] on the Gumti R., was named after Juna Khan, known as Muhammad bin Tughlaq (1325-1351), by the founder Firoz Shah Tughlaq in 1360 (p 300) It was the capital of an independent Muslim kingdom (the Sharqi, or Eastern, dynasty) from 1397-1476, when it was captured by Sikandar Lodi of Delhi, but retained a partial independence until finally conquered by Akbar in 1559 Zafarabad is so called after a son of Ghias-ud-Din Tughlaq Vast Hindu temples and Buddhist monasteries stood at Jaunpur near the Gumti, there are many little tombs and shrines, in which the Muslims have used Hindu and Jain pillars

For a brief visit to Jaunpur, drive from the railway stn. over the stone bridge, then turn to the right, keeping the Fort on the right, until the Fort gate is reached. From the Fort can be seen the Atala and Jami Masjids to the N.W and the bridge to the W The Jhanjhari (Chachakpur) Masjid, which is on the E, is concealed by trees and is approached by a footpath from the city. From the Fort the Atala Masjid is reached by a road leading straight from the Fort gate and turning to the left after a short distance, thence past the Town Hall is the Jami Masjid in a turning to the left of the Fyzabad road Some way beyond the Jami Masjid is the Lal Darwaza Masjid, which is a replica on a smaller scale. Two hours will suffice for seeing the Fort and the Atala and Jami Masjids.

[1] For the architecture of Jaunpur a volume published by Messrs Führer and Smith of the Archæological Survey of India, entitled the *Sharki Architecture of Jaunpur* (Trübner), may be consulted, and Fergusson's *Indian Architecture*, 2, 222

The massive stone **Akbari Bridge**, 654 ft. long, consists of fifteen spans, the middle group of four being larger than those at each end. It was designed by Afzal 'Ali, a Kabuli architect, at the expense of Munim Khan, one of Akbar's high officers, and formerly his guardian. It was commenced in 1564 and completed in 1568 The bridge has suffered frequently from floods, notably in 1774 and 1871 After 1887 the pavilions surmounting the piers were restored Seven spans were damaged in the 1934 earthquake. At the S. end of the bridge is a stone lion somewhat larger than life, which was found in the fort Under it is a young elephant, which it is supposed to have seized. From this point distances in the city and province were calculated

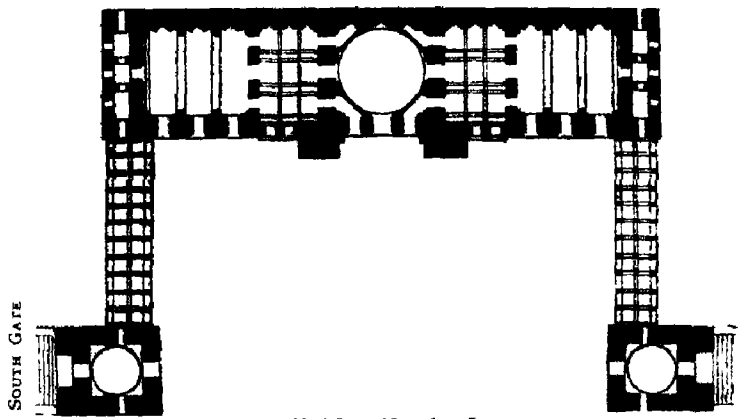
Near the bridge on the left bank is the Fort (built in 1360 A D) of Firoz, containing a Masjid, almost entirely constructed from ruined temples The entrance gate, 47 ft. high, constructed by Munim Khan, is covered with *kashani kak*, a sort of blue and yellow enamelled bricks, of which beautiful portions remain. The inner gate has many stones of Hindu temples built into the walls, on some of which is carved a bell.

200 ft from this gate is a low mosque, 130 ft. by 22 ft, divided into three chambers by lateral walls, with a reservoir in front, and a remarkable lat, or *minar*, apparently unaltered since its erection An inscription on the mosque records its erection in 1376 by Ibrahim Naib Barbak, brother of Firoz Shah Tughlaq. The river-face of the Fort is 300 ft beyond this pillar, which is 150 ft above the bed in height, and commands a view of the country and city. Before reaching it a round tower, called the **magazine**, will be noticed, with a *hammam*, or bath, on the left.

Some 400 yds. to the N. of the bridge, not far from the *Town Hall*, is the N entrance of the **Atala Masjid**, completed 1408, on the site of an old Hindu temple dedicated to the goddess Atala Devi, which was destroyed in 1364, when Khwaja Kamal Khan, also called Khan-i-Jahan, a courtier of Firoz Shah Tughlaq, commenced to build the mosque from temple materials, the Sultan Ibrahim Sharqi (1401-1440) completing the work It has two-storied colonnades

On the principal *mihrab* ("arch"), built of black marble, immediately in the centre of the main W wall of the Masjid proper, in which the prayers are said, is a verse from the Koran, and above it the creed. The façade is 75 ft high. Almost in the centre of the large courtyard, and to the N.E. of the *musallah* (lit. praying-carpet), is a well with a fine citron-leaved Indian fig-tree (*Ficus venosa*). At the S.W corner of the large square is a chamber screened by a lattice of stone, intended for the women. Leading from it to the roof is a staircase. Behind the propylon, screening the dome from the courtyard and surrounding three sides of the drum of the dome, is a chamber some 11 ft. high and 6 ft wide Munshi Haidar Husain of Jaunpur restored the façade in 1860.

½ m N W of the Atala mosque, on a platform 20 ft in height, is the **Jami Masjid**, mainly built by Sultan Hasan Sharqi (1452-78),[1] commenced by Shah Ibrahim 1438, and finished after 1478. Some attribute the completion to Ibrahim in 1448, as his family are said to lie in the cloistered court of a building adjoining the N side of the Masjid



West half of Jami Masjid at Jaunpur

At the S gate an inscription (upside down) in Sanskrit (8th century) will be seen on one of the outer voussoirs of the exterior arch; another in Tughra characters over the top of the central *mihrab*; and a third in Arabic characters around the outer margin of the arch The E. side is in a dilapidated condition, and was probably destroyed by Sikandar Lodi. The N. and S entrance-gates were restored in 1860, and are surmounted by domes In the cloisters and walls many

[1] This King was conquered by Sultan Bahlol Lodi, of Delhi, but was allowed to remain in Jaunpur.

stones from Hindu temples have been utilised. Its general arrangement resembles that of the Atala Mosque, although the cloisters here have three tiers, whilst those at the Atala have only two The mosque (W. end) is very massive, almost fort-like in construction It measures 59 ft by 235 ft, including the thickness of the walls but not the bastions at the angles It is divided into five compartments on the ground floor, and above are two zenana chambers, one on each side of the dome, with stone carved ceilings On the E side is an immense propylon 80 ft high, divided by string courses into five storeys.

N of the mosque is the burial-ground of the **Sharqi Kings**, the walls of which approach the N wall of the mosque within 30 ft In the quadrangle is the tomb of one *Ghulam Ali*, with a fine Persian inscription In the centre is the reputed tomb of *Sultan Ibrahim Shah*. The only inscription is on a round stone in the centre, which contains the Kalima

Next to the supposed tomb of Ibrahim is said to be that of his grandson, Sultan Hasan Shah

Besides those already mentioned, six other mosques deserve visiting (1) The Char ungli, **Mosque** of **Malik Khalis Mukhlis**, built on the site of a Hindu temple of Vijaya Chandra, which was broken down by Malik Khalis and Malik Mukhlis, governors under Sultan Ibrahim In one of the pillars is a black stone, still worshipped by the Hindus. (2) **Chachakpur Mosque**, called **Jhanjhari Masjid** on account of the "screen-like" appearance of its ornamentation, was a temple built by Jai Chandra, and converted by Ibrahim into a mosque. (3) To the W. of the city is the **Lal Darwaza Mosque**, so called in memory of the "high gate painted with vermilion" belonging to the palace erected close by at the same time by Bibi Raji, Queen of Sultan Mahmud (1440-52), and destroyed by Sikandar Lodi This is the smallest of the Jaunpur mosques. The style of architecture is the same as that of the Jami and Atala Masjids, but the building throughout is on a less massive and much lighter scale. The date is uncertain, though probably the cloisters of the court were erected about 1447 On the N, S, and E sides of the court are massive gate entrances The cloisters are two bays deep, and the W walls, as well as the cloisters, are panelled. The columns deserve study on account of their variety The propylon, the principal feature of the building, standing in the centre of the W façade, is 48 ft 6 in. high, and is wider at the base than the top The towers contain staircases leading to a mezzanine floor on each side of the dome. The principal mihrab is of black stone. On the top of the architrave is an Arabic inscription (4) **Mosque of Nawab Muhsin Khan** Sukh Mandil, who was the Diwan of Ali Kuli Khan-i-Zaman, had built a temple where this mosque stands When Ali Kuli was killed the building came into the hands of Muhsin Khan, one of Akbar's governors in 1558, who destroyed the temple and built a mosque. (5) The **Mosque of Shah Kabir**, built by Baba Beg Jalair, Governor of Jaunpur in Akbar's reign, in 1567, in honour of the saint Shah Kabir (6) The **'Idgah Mosque**, built by Sultan Husain Sharqi (1452-78), and repaired in Akbar's reign by Munim Khan Afterwards it fell into a ruinous state, and was deserted till restored by Mr Welland, Collector, in 1802

The chief features of the Jaunpur mosques are the use of Jain

materials, the two-storeyed arcades, the great gates, and the large central screen arches of the mosque proper, truncated pyramids, used as minarets as well as gateways

At m 167 the bridge over the Gumti River is 1472 ft long (1874)

169 m Zafarabad junction (for the Civil Lines of Jaunpur) The **Church** (Holy Trinity) contains a tablet to Manaton Collingwood Ommaney, B C S, Judicial Commissioner of Oudh, who rebuilt it in 1852, and died at Lucknow during the siege of the Residency

The **mosque of Shaikh Barha**, in Zafarabad, composed wholly of Jain materials, is older than any at Jaunpur

A direct line runs from Zafarabad to Lucknow *viâ* Sultanpur

At m 178 the Sai River bridge is 1334 ft long (1874)

509 m **from Saharanpur** by Rae Bareli and 187 m from Lucknow by the Fyzabad loop is **Benares Cantonment** station (see Route 5)

520 m **Mughalsarai** junction with the E I Ry main line (see p 54)

ROUTE 21.

DELHI to ALLAHABAD on the E I Railway by **Ghaziabad, Aligarh, Hathras Junction, Tundla Junction, Etawa,** and CAWNPORE, and Cawnpore to LUCKNOW

From Delhi the E Indian Railway, opened 1864, runs to

12 m **Ghaziabad** junction (see p 328)

79 m **ALIGARH** junction (R, D B, between the Civil Station and the city) A line from here, opened 1872, runs N E to (61 m) Chandausi and to (104 m.) Bareilly, crossing the Ganges (p 417) Aligarh is 825 m from Calcutta, 904 m from Bombay, by road 81 m to Meerut, 45 m to Etah, 37 m to Muttra (*viâ* Iglas), 35 m to Anupshahr

Aligarh, "the high fort," is the name of the fortress which protects the town of Koil (112,655 inhabitants), which is of undoubtedly great antiquity Buddhist remains have been found in excavating the eminence on which stood the citadel of Koil, which was in earliest times a noted Rajput stronghold. Qutb-ud-din Aibak marched from Delhi to Koil, "one of the most celebrated fortresses of Hind," in 1194 In 1252 A D Ghias-ud-din Balban was governor of Koil He set up a great minaret, which bore an inscription with the name which he had before he ascended the throne—"Baha-ud-din Shamsi," and the date 1253 A D. In 1862 this minaret was pulled down

Ibn Batuta mentions Koil in his account of his embassy from Delhi

to China, 1342 A.D. He calls it a fine town surrounded by mango groves. In 1401-40 it became the scene of battles between the armies of Ibrahim Sharqi of Jaunpur and Delhi An inscription in the fort of Koil records its construction during the reign of Ibrahim Lodi, 1524

After the death of Aurangzeb (1707) Koil was considered by the Mahrattas, Jats, Afghans, and Rohillas of great strategical importance as commanding a number of main roads, so that the Aligarh district became the battlefield of rival armies In 1759 the Afghans, under Ahmad Shah Durani, drove out the Jats, and about 1776 Najaf Khan (who expelled the Jats from Agra in 1774) repaired the fort of Ramgarh and changed its name to Aligarh In 1784 Maharaja Scindia captured Aligarh, in which he found treasure valued at a crore of rupees In 1788 it was taken by Ghulam Kadir Khan (the Rohilla freebooter who blinded the Emperor Shah Alam in 1788), and retaken by Scindia, whose general, De Boigne, organised his battalions receiving 32 parganas for their maintenance

In 1796 De Boigne was succeeded in command by Jean Perron, who, when the British declared war against Scindia in 1803, surrendered himself Aligarh was then taken (29th August 1803) by a brilliant *coup de main* by General Lake, when 281 guns were captured

When the news of the mutiny at Meerut arrived, on the 12th of May, the Aligarh garrison of 300 sepoys mutinied on the 19th Among those who were compelled to seek refuge in Agra was Lady Outram, wife of Sir James On the 26th a detachment of troopers arrived, and held their ground up to the 21st of June, but had to return to Agra. On the 5th of October Colonel Greathed's column from Delhi occupied Koil.

The **Civil Station** of Aligarh lies N.E of the city, from which it is separated by the railway It includes the old Cantonment, which was abolished in 1869 It is well planted with trees, and has a large *maidan*, the old parade ground, known as Hardinge's ground, in the centre

The principal thoroughfares are the Anupshahr Road, which runs past the W side of the *maidan* and the road from the railway station which ultimately joins the Anupshahr Road beyond the College

On the left of the Anupshahr Road lie the District School, the Judges' Courts, a cemetery, Jail, and the District Office and Courts Opposite the Judges' Courts a broad road runs between the Crosthwaite Hall, which is used for Municipal and District Board meetings, and the Harrison Clock Tower, named after a former Collector, in the Cadell Bagh The Government of India Forms Press is at Aligarh There are several metal works, especially lock works The *Lyall Library* was founded by the Hindus of Aligarh in 1889, and is built in the modern Saracenic style The old cemetery of 1802 lies towards the fort

The object of chief interest is the Muslim **Anglo-Oriental College**, which was founded by the late Sir Saiyad Ahmad Khan, K.C.S I., LL D The buildings are on the plan of the Oxford and Cambridge Universities, and are surrounded by grounds of 1100 acres The College was opened in 1875. It was raised to the status of the **Muslim University** in 1920 There

are five Institutions: the University proper, the Intermediate College, the Muslim University School and High School, and the Tibbia College. The University receives subsidies from the Govt of India, from the Provincial Govt, and from several Indian States, including Hyderabad The control is in the hands of a University Court, an Executive Council, and an Academic Council The special feature is the religious instruction. Considerable prominence is given to the encouragement of manly sports The numerous students come from all parts of India and Burma, and some even from South Africa and Malaya

The *Fort of Aligarh*, 2 m N of the town, was built in 1524, and reconstructed by French engineers, as mentioned, and was further improved after its occupation by the British It is surrounded by a ditch 18 ft deep and from 80 ft. to 100 ft wide. The main entrance is on the N Perron's House, known as the Sahib Bagh, is ½ m. to the S of the fort, and is the Medical Institution of the University It has a square gateway in front, with an arched entrance and a guard-room above it In the garden is a well with a Persian inscription. Another house belonged to the Chevalier du Drenec

In the **City** of **Koil**, at the top of a long and rather steep slope, is the principal mosque, with three central domes, two side domes, and four minarets It was built by Sabit Khan in 1728 during the reign of Muhammad Shah. The eminence on which it stands is called the Bala Kila, and in it have been discovered remains of Buddhist and Hindu temples, some of which have been placed in the compound of the Aligarh Institute, a scientific society founded before 1875.

S E of the great mosque is the *Moti Masjid*, or "Pearl Mosque." In the city is an historic tank, "Achal," surrounded by small Hindu temples and shrouded by magnificent trees swarming with monkeys

The Aligarh annual **Fair** (held early in February) usually offers special opportunity for witnessing the inner life of an Indian district

97 m. **Hathras** junction. The town is 6 m from the station The Fort was one of the strongest in Upper India until 1817, when it was captured by Maj-Gen Marshall, after a short siege, and dismantled During the Mutiny order was maintained by a blind pensioned Hindu official, who was subsequently murdered by the rebels at Kasganj

The E I Railway is crossed by the Cawnpore-Muttra line, opened 1875, of the B B. and C I. Ry. (Route 12) The branch from Hathras Road jn to Cawnpore (189 m) passes Kasganj (34 m) jn for the R and K Rly. line to Bareilly, Farrukhabad (101 m), Fatehgarh, the headquarters of the Farrukhabad district (105 m), opened 1884, and Kanauj (138 m), opened 1881

The Europeans at **Fatehgarh** (D.B.K.), in 1857, after the outbreak of the Mutiny here on 18th June, had to leave the Fort, which was in use as a gun-carriage factory, and attempted to escape to Cawnpore in boats A few who reached Bithur (p 436) were captured and murdered on the 10th and 15th July at Cawnpore. Others were brought back. A monument has been erected over the well into which the bodies were thrown, and there is a memorial church close by.

Kanauj, the famous northern capital, first of Tomar and then of Rathor Rajputs, was raided by Mahmud of Ghazni in 1018, and taken by Shahab-ud-din Ghori and Qutb-ud-din Aibak in 1194, whereupon the Rathors removed to Rajputana The ruins of this great city are very scanty, but part of a mosque, "Sita's Kitchen," with Jain pillars, remains Humayun was defeated here by Sher Shah in 1540 A D and had to leave India

127 m. **Tundla** junction (R) A line from here runs W into *Agra*, distant 18 m (Route 13) Visitors to Agra book to the Fort Station Some of the E I R trains run to this, and some diverge at the Jumna Bridge junction to Agra City, reached by the modern Strachey Bridge of *nine spans of 100 ft*

150 m **Shikohabad** junction for line to (66 m) Farrukhabad jn, opened 1906

184 m. from Delhi is **Etawah** station (R, D B ½ m), reached by the railway in 1861, by road it is 72½ m. from Agra, 61 m to Fatehgarh, 33 m to Mainpuri, 66 m to Gwalior (with State R Hs at intervals), and 120 m to Cawnpore Passenger motor lorries run daily to and from Mainpuri

Etawah may have been founded by a Chauhan Chief, descended from the famous Prithvi Raja, King of Delhi (p 306). The name is properly *Itawa*, and is popularly derived from *int*, "a brick" Both town and District were captured by Qutb-ud-din Aibak in 1193, but the Chauhans regained their power and held it till the reduction of Etawah in 1392 by Muhammad bin Firoz, who destroyed the old Hindu fort Successive punitive expeditions followed till 1432, and then for a time Etawah passed into the hands of the Sharqi Sultans of Jaunpur, who built the extensive brick fort overlooking the Jumna The rule of Delhi was restored in 1487 by Bahlol Lodi Etawah rose to some importance under the Mughal Emperors, and then was held in succession by the Nawab of Farrukhabad, the Nawab Wazir of Oudh, the Rohillas and the Mahrattas In 1774 it again came under the Oudh Nawab, but the headquarters were removed from Etawah to Kudar-kot, 23 m E, and the fort was dismantled The district was ceded to the East India Company in 1801

In the Mutiny the civil officers had to retreat to Agra, but the District was soon regained by the Collector, Mr A. O Hume, C B (the famous ornithologist and, in 1885, "Father of the Congress"), who raised a local force and fought several actions until relieved in December

The *City* stands picturesquely amongst a network of ravines on the N bank of the Jumna, at a point where it bends sharply backwards on its own course It is divided into two parts, a ravine from N.W to S E separating the old city on the S. from the new. In the centre is *Hume Ganj* Square. ½ m to the N. lies the *Civil Station* 1 m. W. of the city lies the Fisher Forest, an example of afforestation of ravine land

The *Jami Masjid*, on high ground toward the Jumna, was built, possibly from old Hindu materials, by one of the Jaunpur kings. The screen, 47 ft. high, before the dome is similar to that of the Atala Masjid of Jaunpur (p 425). The façade is 130 ft. long, but only 20 ft wide

The *Bathing Ghats* on the Jumna,

below the ruined fort, are worth a visit From them is seen the white *spire* of a modern *Jain temple*.

270 m. from Delhi is **CAWNPORE** central station, 633 m from Calcutta, 839 m from Bombay, the railway reached here in 1859. by road Cawnpore is 15 m to Bithur, 49 m to Lucknow, 70 m to Orai, 136 m to Jhansi, 40 m. to Hamirpur, 134 m to Etah, 48 m to Fatehpur, 119 m to Allahabad, 224 m to Saugor *viâ* Hamirpur on the Jumna (boat bridge only) Four railways meet here - E I, B B C I, G I P., Bengal and N W Comfortable and convenient waiting-rooms

The *City*[1] (pop 487,324, alt 404 ft) is on the right bank of the Ganges, old Cawnpore is 2 m to the N.W of the present city The name means City of Kanh, or husband as applied to Krishna It *manufactures tents, harness*, shoes, and other leather-work There was a terrible communal clash here in 1931

The village of Jajmau (U P. Tannery) was occupied by John Carnac in 1765 It was garrisoned in 1780, and was ceded in 1801 to the East India Company by the Nawab Wazir of Oudh It owes its importance to European enterprise

The city lies to the N W of the Cantonment, while the Civil Station and most of the mills and factories lie N W again of the city and near the river. The tail of the Ganges Canal separates the S.E. side of the city from the Sadr Bazar of the Cantonment, and the railway to Lucknow runs to the Ganges bridge below the outfall.

This bridge (1910) carries the broad and metre gauge and is 2794 ft. long The old metre-gauge railway bridge (1875), 2850 ft. long, carries the road and other traffic on two decks since 1930, the metre-gauge having been diverted in 1927.

[1] Plan faces p 436.

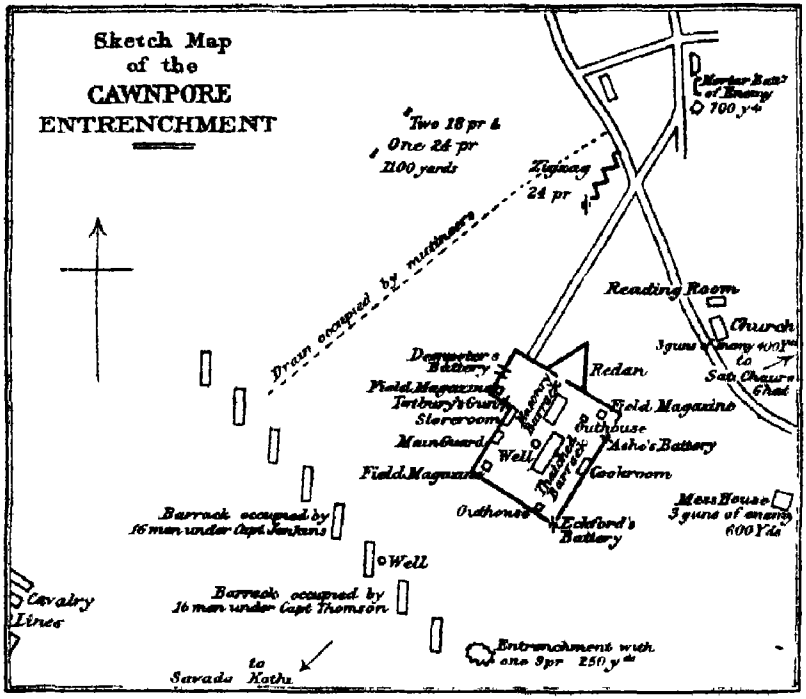
The chief interest of the place for Englishmen lies in the events of the Mutiny in June 1857,[1] which ended in a massacre The English force in the Cantonment, which straggled for 6 m or 7 m., consisted of a company of artillery, 60 men of H.M 84th and 30 men of H M 32nd, who were joined just before the siege began by 15 men of the 1st Madras Fusiliers, and the total European population, including civilians and women and children, numbered not less than 950. The Sepoy troops were composed of three infantry regiments and one of Cavalry. At that time Dhundu Pant, known as the Nana Sahib,[2] the adopted son of Baji Rao II, the ex-Peshwa, and whose claims to succeed to the pension had been rejected, was living at Bithur (15 m), on friendly terms with the English at Cawnpore

Sir Hugh Wheeler, a gallant veteran (70 years old) commanding the Division, doubted the fidelity of the sepoys, and resolved to store with provisions a rallying point. The natural position to select was the Magazine in the N.W corner of the civil lines which rested on the river, and was surrounded by strong walls. But General Wheeler feared that as he would have had to replace the sepoy guard, by showing his mistrust he would hasten the rising The spot he chose was the centre of a plain lying S of the city, where there were two barracks. Here he raised some earthworks about 4 ft high, and barely 2 ft. thick at the crest; but it was supposed by Wheeler that the mutineers would at once pro-

[1] For a graphic account of the siege of Cawnpore, the traveller cannot do better than study T R E. Holmes's *History of the Indian Mutiny* (Macmillan, 1904) See also *Cawnpore*, by Sir G. O Trevelyan (Macmillan, 1907)

[2] The third Peshwa Balaji Baji Rao had been also known as the Nana Sahib.

ceed to Delhi, and that only temporary protection was needed from the city mob. He applied to Sir H Lawrence at Lucknow, who sent a company of H.M. 32nd Reliance was placed in the Nana. The General asked him to send a body of his retainers for the defence of the Magazine and of



the Treasury beyond it in Nawabganj The same day (22nd May) all the non-combatants betook themselves to the entrenchment There was no lack of arms and ammunition, but there were only ten guns. On the 3rd June General Wheeler returned 80 men of the 32nd to Lucknow, and 50 men of the 84th on the following day, although in case of attack his own position was not defensible

On the night of the 4th of June the 2nd Cavalry rose and galloped off to Nawabganj. The 1st Bengal Infantry followed, sacked the Treasury, threw open the Jail, burned the Public Offices and the Records, and captured the Magazine with all its ammunition and artillery, with which they prepared to march to Delhi. The 53rd and 56th eventually joined also, but 80 men of the 53rd remained faithful The mutineers then started on the march to Delhi, but were persuaded at Kalianpur by an agent of the Nana to return. On 6th June Wheeler was warned by the Nana to expect attack; and by noon the siege of Cawnpore had begun.

The garrison consisted of about 165 British soldiers and 30 officers, exposed to the continuous fire of 3000 trained sepoys. The total number in the entrenchment is

estimated at 900, of whom more than half were women and children. There were many heroes in this little band, and to Captain Moore, of the 32nd, has been assigned the first place.

The position will be understood from the accompanying plan, adapted from Lieut Mowbray Thomson's *Story of Cawnpore*. All round it were buildings and cover —a mess-house on the E, a Church and reading-room near the N.E corner, a racquet-court and other buildings opposite the N W corner, a deep drain giving shelter to snipers all along the W, and a row of incomplete barracks on the S, the nearest barrack only 250 yds from the entrenchment. To prevent enfilade it was necessary to occupy Nos 2 and 3, the former at first by Lieut. Glanville, and then by Lieut Mowbray Thomson, of the 53rd, and the latter by Captain Jenkins of the 2nd L C. By these barracks was a well which served as a general grave. The lines of the main entrenchment were defended by the Redan under Major Vibart, of the 2nd L C, on the N, by Ashe's Battery and by Eckford's on the E, and by Totbury's Gun and Dempster's Battery in a projection on the W. side, but except for repelling assaults and keeping the enemy at a greater distance the guns were of but little avail The two barracks, one of them with a thatched roof, were entirely unprotected, and the only well in the entrenchment, 60 ft. deep, was exposed to the full fire of the enemy[1] And yet the garrison held out for twenty days, until provisions were nearly exhausted. The distances from the enemy's guns to the entrenchment were carefully recorded immediately after the recapture of the place in July By the 11th June the enemy had three mortars, two 24-pounders, three 18-pounders, one or two 12- and 9-pounders, and one 6-pounder playing on the entrenchment. On the 12th June the thatched barrack was set on fire, and thereafter many of those within the entrenchment lived day and night in the open in a temperature of 120 to 140 degrees of heat. On the 15th June Captain Moore led a successful sally, which resulted in the spiking of five guns and the blowing up of a 24-pounder, but the supplies from the captured magazine were practically inexhaustible One-third of the numbers of the defenders were lost by the 21st June, over 250 persons were buried in the outside well, of fifty-nine artillery men only four survived at the end, and when the British troops re-entered Cawnpore they found that there was not a single square yard in the buildings in the entrenchment that was free of the scars of shot. On the 16th June the enemy received reinforcements from Lucknow, and on the 23rd, the anniversary of Plassey, they attempted a general assault. On the 25th the Nana offered terms to the survivors, and these were accepted, though General Wheeler's vote was against surrender

On the 26th there was an armistice, and it was arranged that the British should evacuate their fortified position, and, leaving their guns and treasure, should march out with their arms and 60 rounds of ammunition for each man, the Nana promising safe-conduct to the river-side and a supply of boats to take them down the Ganges. The next morning, 27th June, the survivors, about 450 in number, marched down to the

[1] John Mackillop, the joint magistrate, "jocosely said that he was no fighting man, but would make himself useful where he could," and undertook the work of drawing water from the well. In less than a week he was mortally wounded: his last words were an earnest entreaty that someone would go and draw water for a lady to whom he had promised it.

Sati Chaura Ghat, and went on board It was 9 A.M. before they were all embarked Then, on the order of Tantia Topi, a bugle sounded, the boatmen left the boats fixed in the mud, and a fire of grape-shot and musketry opened on all sides The thatch of the boats took fire, and the sick and wounded were suffocated, the sepoys jumped into the water and killed others Orders then came from the Nana to kill no more women, and about 125 women and children were carried back to Cawnpore

One boat, which had been pushed off, drifted down the river, and those on board propelled it as they could, with numbers rapidly diminished For thirty-six hours it floated down stream, pursued and attacked by the enemy On the second morning the occupants woke to find themselves in a side stream with sepoys on the banks Two officers, one sergeant, and eleven soldiers leapt ashore and dispersed them But meanwhile the boat had drifted away, and they were compelled to take refuge in a small temple Breaking out and through, they took to the river. Four of them—Lieuts Mowbray Thomson and Delafosse, and Privates Murphy and Sullivan —being strong swimmers, reached the Oudh shore, and being succoured by the Talukdar of Murar Mau, lived to tell the story of Cawnpore[1] The boat was subsequently overtaken and brought back with eighty survivors The men were shot at once by order of the Nana, and the women and children sent to join the 125 who had been spared at the Massacre Ghat in the Savada Kothi,[1] where the Nana lived during the siege. They were afterwards removed with a party of women and children from Fatehgarh to a small house called the Bibi-garh, near which the Nana was residing in a hotel This house contained two rooms, 20 ft by 10 ft, and a number of dark closets, and had a courtyard 15 yds square in front of it, between the 7th and 14th of July twenty-eight of the captives died.

But retribution was not far off. On the 7th of July General Havelock marched from Allahabad with 1400 British and 600 Sikhs On the 12th of July, at 7 A.M., they halted at Balinda, 4 m from Fatehpur Here they were attacked and inflicted a crushing defeat On the 15th of July Havelock again defeated the rebels at Aong, and drove them over the bridge across the Pandu Nadi and the Nana ordered the massacre of the captives in the Bibi-garh The five men among them were brought out and killed in his presence A party of the 6th B I from Allahabad was ordered to shoot the women and children, but they intentionally fired at the ceiling Then a party of butchers were sent in In the morning all the bodies were thrown into an adjoining well

The Nana went out to oppose General Havelock with 5000 men and a formidable train of artillery, but the battle, fought 2 m S of the Cantonment on 16th of July, ended in the confused flight of the rebels to Bithur, after they had blown up the Magazine On the 17th the British force marched on to occupy the Cantonments, but ere it reached them learned the story of the massacres

Four months later Cawnpore —which had been the base of

[1] General Delafosse died in 1904, and General Mowbray Thomson, who received a K.C.I.E through Lord Curzon, in 1917. Sullivan died of cholera very shortly after his escape, but Murphy survived for many years, and was placed in charge of the Memorial Garden Their rescuer, Raja Sheoraj Singh, died in 1911

[1] This lay to the W of the row of 10 complete barracks, and of the race course W of them, close to the Grand Trunk Road

operations for General Havelock's advance on Lucknow—was the scene of fighting Sir Colin Campbell marched on the 9th of November 1857 to relieve Lucknow, leaving behind him for the protection of Cawnpore, his base of operations, 500 British and 500 Madras troops, commanded by Major - General Windham, of Redan (Sebastopol) celebrity On the 27th of November, Sir Colin began his march back to Cawnpore, having with him 2000 women, children, sick and wounded and the treasure which had been rescued from Lucknow On nearing the Bridge of Boats, on the 28th, he beheld a conflagration

Tantia Topi, a follower of the Nana, at the head of 15,000 of the Gwalior Contingent, had marched on Cawnpore, and by the 19th of November had cut off the place from the W and N W, from which its supplies had been obtained On the 26th General Windham moved out from Cawnpore and attacked Tantia's right wing, but on the two following days he was gradually driven back to his entrenchment on the river-side, leaving the bridge—the link with Lucknow—dangerously exposed Sir Colin arrived just in time to save the bridge.

Having despatched his convoy to Allahabad on the 3rd, Sir Colin, on 6th December, took the initiative The arrangements made for driving the enemy back from their line—which rested on the city and the brick kilns to the W of it, and extended nearly as far as the Ganges Canal on that side—were completely successful, the Gwalior camp, with all its stores and magazines, was taken, and the enemy routed with great slaughter to beyond the canal The pursuit of their right and centre was not properly pressed, but next day Brigadier-General Hope Grant, with the cavalry, scattered the enemy and captured fifteen guns.

On 27th April 1858, Captain Sir Wm Peel, the gallant leader of the Naval Brigade from the *Shannon*, died He had been wounded at Lucknow on the 8th April at the taking of Martinière, and contracted small-pox from a dhooly in which he was taken to Cawnpore (having refused to occupy a stage-carriage, which his sailors had upholstered for him) He is buried in the old cemetery ½ m W. of the entrenchment.

On the way to the Memorial Church, which is about 1½ m. distant from the railway station, is the site of General Wheeler's *Entrenchment* The line of defences and the principal buildings inside them are indicated by pillars, those of the former being connected by a low hedge. To the S, across the road and adjoining the old European barracks, is a garden enclosure surrounding the well in which 250 of the garrison who were killed or died during the siege are buried The inscription on the cross runs *In a well under this Cross were laid, by the hands of their fellows in suffering, the bodies of men, women, and children, who died hard by during the heroic defence of Wheeler's Entrenchment when beleaguered by the rebel Nana—June 6th to 27th,* A.D MDCCCLVII

The **Memorial Church**, built on the N E edge of the entrenchment, in Romanesque style, was consecrated in 1875. On the walls are fourteen memorial tablets giving the names of those who died at Cawnpore in 1857 A fine view of Cawnpore is obtained from the belfry Outside the church, on the S. side, is a railed memorial slab with an inscription commemorating "those who were the first to meet their death, June

1857," and a few yards farther E. are three graves in another enclosure with a cross and the record that—

"Here lie the remains of
MAJOR EDWARD VIBART,
2nd Regt Light Cavalry,
And about 70 officers and soldiers,
Who, after escaping from the
Massacre at Cawnpore,
On the 27th of June 1857,
Were captured by the rebels at Shivrajpur,
And murdered on the 1st of July"

The **Sati Chaura** or **Massacre Ghat** is about ½ m N. by E of the Church. A grassy road between high banks, lined with trees, among which the murderers concealed themselves, leads down to the river On the bank is a temple of Siva, of hexagonal shape, old and ruined Two narrow flights of steps lead from this temple to a broader flight An inscription, "In Memoriam, 27th June 1857," recalls the tragedy

From the Sati Chaura Ghat ravine the road runs N over the railway and the Ganges Canal to the Queen's Park Here is a colossal statue in bronze (by a local sculptor) of the Queen-Empress Victoria, a fine building has been erected as a memorial of King Edward VII and is used for public functions and entertainments

The **Memorial Gardens** adjoin the Park Upon a mound over the well in which the victims in the **Bibi-garh** were buried, is the memorial, in the form of an octagonal Gothic screen designed by Sir Henry Yule, R E In the centre of the enclosure, on the actual well, is the figure of the *Angel of the Resurrection* in white marble, by Marochetti, with arms crossed on her breast, as if resigned to the Almighty Will, each hand holding a palm, the emblem of peace This figure was the gift of Lord and Lady Canning. Over the arch is inscribed. "These are they which came out of great tribulation." Around the screen wall which marks the circle of the well is the legend: "*Sacred to the perpetual Memory of a great company of Christian people, chiefly Women and Children, who near this spot were cruelly murdered by the followers of the rebel Nana Dhundu Pant, of Bithur, and cast, the dying with the dead, into the well below, on the xvth day of July* MDCCCLVII" In front of the monument is a small enclosed cemetery One of the tombs in it is to the memory of the women and children of H M 's 32nd Regiment Another records the murder on July 15, of R B Thornhill, Judge of Fatehgarh, his wife (a granddaughter of Mrs Siddons) and two of their children

Close to the Memorial Gardens is Christ Church, consecrated 1840, and a mission founded by Henry Martyn.

1 m upstream from Sati Chaura Ghat, and above the combined railway bridge, is the site of the pontoon bridge over which passed the convoy, 3 m long, of women and wounded, brought from Lucknow in November 1857 by Sir Colin Campbell, and here was Windham's small entrenched camp just by the Government Harness Factory.

Bithur is 15 m N, but the Non river (2 m from Bithur) is passable only by a boat bridge in the dry season. At other times the railway or an aeroplane can be taken

At the Brahmavarta-Ghat is shown the shoe of the horse which Brahma is said to have sacrificed after the creation of the world A temple was built by the Mahrattas on a mound S. of the town, where Valmiki is said to have composed the original version in Sanskrit of the *Ramayana*, and

where Sita, the consort of Rama, is said to have given birth to twin sons, Lava and Kusha, while in exile. His house is also shown In early November is held a large festival The pensioned Peshwa's palace was destroyed after the battle of Bithur on 16th August 1857 There are still many Mahratta Brahmans in the town

317 m **Fatehpur** (D B K near ry stn. and an Inspection Bungalow on the Grand Trunk Road), headquarters of the district of that name Roads, to Cawnpore, 48 m., to Allahabad, 71 m., N E to Rae Bareli; S W to Banda. Motor-lorry service as far as Lalauli, on bank of Jumna R., on the road to Banda; also motor service(s) to Kora (Jahanabad, 32 m.), an old town which in the days of Akbar and his successors formed part of the province of Allahabad. (See p 438 under Kara)

On the outbreak of the Mutiny here, on 9th June 1857, most of the Europeans at Fatehpur escaped to Banda, but the Judge, Mr R T Tucker, was killed fighting to the last He took up his position on the roof of the Court building and was only overcome when this was set on fire The Commissioner of Allahabad wrote —"It is impossible not to admire, how far it may be regretted, the heroic devotion of the late Mr Tucker, nor is it much a matter of wonder that his conduct and his personal prowess actually succeeded in preserving for a few hours longer some show of order. Mr Tucker, by his earnest and open profession of religion, and by his unbounded personal liberality, had commanded the respect, if not the affection, of a large number of the inhabitants of the city, and, when the excited mob returned in triumph from his slaughter, two Hindus of the town stood out before them and reviled them as the murderers of a just and holy man. It is scarcely necessary to add that they immediately shared his fate." In the Fatehpur cemetery Mr Tucker's devotion to duty is commemorated on his grave. Four huge masonry pillars erected by him stand on the Grand Trunk Road, to the W of the town, close to the Inspection Bungalow Two of these pillars bear inscriptions in Urdu and Hindi, giving the substance of the Ten Commandments. Similar Urdu and Hindi inscriptions on the other two pillars are quotations from St John's Gospel

On 12th July 1857 Havelock arrived On 31st October 1857, the Naval Brigade, under Captain W Peel, and a small force under Colonel T S Powell, of H.M 53rd Regiment, reached Fatehpur. Mutineers were reported to be occupying a position at Khajuha, in the N W of the district When attacking on 1st November Powell was shot, whereupon the command devolved on Peel, whose Brigade carried the enemy's position The action is commemorated on Powell's tomb outside the village of Kunwarpur, 9 m from Fatehpur and not 2 m. from the Malwa station of the E.I. Railway, within sight of the metalled road running from Fatehpur to **Bindki** (17 m., the most important mart in the District) and Khajuha (21 m.).

At **Khajuha** Aurangzeb in 1658 overthrew his brother Shuja, capturing 114 guns, 115 elephants, and much treasure. In honour of his victory he built a large *sarai*, enclosing 10 acres, and laid out the Badshahi Bagh, a walled garden covering 18 acres. One of the old garden pavilions, on high ground, has been converted into a good Inspection Bungalow.

354 m **Sirathu** (in the Allahabad District), for **Kara** on the Ganges; the provinces of Kora and Allahabad, taken from the Nawab Wazir of Oudh by Clive in 1765 and given to Shah Alam, were often called "Corah and Currah".

Kora (Corah) is in the Fatehpur district. There are still some interesting remains and ruins at Kara. It was here that Ala-ud-din Khilji basely murdered his uncle, the Emperor Jalal-ud-din, in 1296. On the opposite side of the Ganges is Manikpur, now a village in the Partabgarh district, where there are extensive remains of mosques and tombs dating from the reigns of Akbar, Jahangir and Shah Jahan.

391 m **Allahabad** junction (p. 47). The railway for 40 m. above was opened 1857, but there was a gap below.

Cawnpore to Lucknow

Cawnpore is connected (45 m.) with Lucknow by parallel lines of railway, the broad-gauge line of the E.I.R., opened 1875, and the metre-gauge line of the B. and N.W.R. As far as Ajgain (22 m.) the railway closely follows the road along which Sir Henry Havelock and Sir Colin Campbell advanced to the relief of Lucknow. Beyond Unao (11 m., in for two branches) and near Ajgain is Basiratganj (21 m.), where the rebels were thrice defeated by Havelock. From Unao (D.B.K.) motor-buses run S.E. to Maurawan (27 m.), and N.W. to Bangarmau (31 m.). Some very fair snipe and duck jhils in Unao Dt.

The E.I.R. line passes N. of the Alambagh to the junction station at Lucknow, on the S. side of the old canal of Ghazi-ud-din-Haidar (Route 22).

ROUTE 22.

LUCKNOW

Map faces p. 460

LUCKNOW * became the Capital of the Nawab of Oudh in 1775. The Governor of the United Provinces, H.E. Doctor B. C. Roy (1947), resides here during the cold weather. Although Allahabad is the official headquarters of the Government, the Legislative Council meets at Lucknow, and it has, since 1925, its own Chief Court and gives its name to an Anglican bishopric (1893). Lucknow is the principal centre of Shia Muslims in India and there have been clashes with Sunnis. The city (alt. 391 ft.) covers an area of 36 sq. m., has a pop. (1941) of 387,177. It stands on a bend of the River Gumti, and is lit by electricity. Architecturally the buildings are of interest in the employment of brick.—*Historic Lucknow*, by Sidney Hay (1940), may be consulted.

Lucknow Junction is at Charbagh, to the S. of the city. The new station building, which is a little to the N. of the old one, was opened by the Governor of the United Provinces on the 19th December 1926. The platform is 2250 ft. long. Four broad-gauge and two metre-gauge lines run through the station, which is the centre of the railway

system serving the Province of Oudh.

The B.G. railways are. (1) the E.I. Ry. line, 45 m from Cawnpore (Route 21), by which the G.I.P Ry. mail from Bombay (885 m.) *viâ* Itarsi and Jhansi (Route 8) runs direct into Lucknow, (2) the Oudh and Rohilkhand section of the E I. Ry, opened 1898, which runs S to, 187 m, Benares Cantonment (Route 5) and joins the main line to Calcutta at Mughalsarai (Route 2); (3) the continuation of the same line, N.W through Bareilly to, 102 m, Saharanpur (Route 20), and (4) the E I Ry. loop-line, the old O and R main line, opened 1874, through Barabanki to Fyzabad, Jaunpur, and Benares (Route 20).

The M G railways are (1) the main line of the Rohilkhand and Kumaon Ry. (terminus at Lucknow junction station at Aishbagh and another, Lucknow City, close to the Residency) runs in a northerly direction to Sitapur (1886), Pilibhit (1891), and Bareilly Junction, with a branch from Bhojeepura to Kathgodam (1884), the terminal station for Naini Tal (Route 20, p 419), (2) the track, operated by the Bengal and North-Western Ry, from Cawnpore, which runs parallel with the broad-gauge line and passing through Lucknow connects at Aishbagh with the main line, opened 1898, *viâ* Gorakhpur, through Tirhut, on the left bank of the Gogra river (1885), to Katihar Junction (Route 23) Lucknow is also an important road centre. By road the distance to Fyzabad is 79 m, to Sitapur 52 m, to Cawnpore 47 m, and to Rae Bareli 51 m, to Hardoi (unmetalled) 67 m

Topography.—To the left of the visitor, as he emerges North from the station, is La Touche Road, and to his right is Station Road, both of these lead into Abbott Road. (All-India Radio Studios.) Abbott Road proceeds E., near Government House, crossing Cantonment Road, Banks Road, and the end of Hazratganj, and then, turning slightly towards the N., continues under the name of Outram Road to the Sikandarbagh and across the river Gumti, when it joins the Fyzabad Road at right angles near the Badshahbagh Clyde Road (in which is the Carlton Hotel), runs W. past the Moti Mahal and the Shah Najaf into the Strand Road

La Touche Road, from a junction at right angles with Abbott Road, runs in a N.E. direction to the Kaisarbagh; almost parallel with it is the Cawnpore Road, which proceeds from the left of the Junction station and turning to the N E, passes through Aminabad, the modern business quarter, then N past the Kaisarbagh and the Chief Court building (Pain Bagh) and skirts the E side of the Residency, until it reaches the Strand Road

Canning Street runs S to N from its junction with the Cawnpore Road, and ends at the Shah Mina, close to the Medical College (which stands on the site of the old Machhi Bhawan Fort), the Great Imambara and the Rumi Darwaza This is one of the military roads which were cut through the heart of the city after 1857

Another military road, Victoria Street, also starts from the Medical College (Machhi Bhawan) and proceeds for about 3 m in a S W. direction Two N W. to S E roads meet it on the way, firstly, Nadan Mahal Road, which becomes Ganga Pershad Road, and then Sri Ram Road after crossing Canning Street and at Aminabad Park turns S. for a short distance along the Cawnpore Road and continuing as Hewett Road crosses La Touche Road and connects with Abbott Road. A little further S the Aishbagh Road

takes off from Victoria St and runs S.E. into Abbott Road. On reaching the canal of Ghazi-ud-din Haidar, Victoria Street bends to the S E , and joins the continuation of the Cawnpore Road at the Alambagh.

Napier Street, the third military road, comes into the Medical College from the W and passes to the N of the Chauk , this is the road to Hardoi and Shahjahanpur and the pilgrim route to Hardwar (Route 20, p 412).

The Strand Road runs along the river bank from the Iron Bridge past the Residency and the Chhattar Manzil until it joins Clyde Road, which then runs S. to Wingfield Park From the Baillie Guard Gate of the Residency Neill Road proceeds past the Kaisarbagh into Hazratganj, where the principal buildings of the Civil Station are, and continues, as Park Road and Bandaria Bagh Road, into the Cantonments and Dilkusha, leaving the Martinière and Major Hodson's tomb on the E

Lastly, Havelock Road runs E along the line of the Old Canal to the N. of the Ry station, and, making a half-circle to the N., crosses Cantonment Road (which comes down from the Kaisarbagh and joins Banks Road (which also comes S E from the Kaisarbagh) near Government House Most of the places of interest will be found on one or other of these roads These cannot possibly be well seen in less than two and a half days

Itinerary —To those who are pressed for time, the following routes are suggested :

(1) Drive from Christ Church up Hazratganj, passing on the left the old Post Office (Begam Kothi), Amjad Ali Shah's Tomb (the Chota Imambara), and Nur Bakhsh Kothi (the Deputy-Commissioner's house) : visit the Kaisarbagh quadrangle and the Museum in the Lal Baradari , then proceed along Neill Road to the Residency, passing the Chief Court building (Pam Bagh) on the left, and on the right the Chhatar Manzil palaces, which can be visited after the Residency, when driving down the Clyde Road towards the Moti Mahal and Shah Najaf (left) and the Khurshid Manzil (right) to the Sikandarbagh. From here the starting-point can be reached down Outram Road past the King's Stables (Lawrence Terrace).

(2) Drive straight to the Residency and continue by the Strand Road to the Medical College (on the site of the Machhi Bhawan) , visit the Great Imambara, and drive through the Rumi Darwaza and Victoria Park to Husainabad and the Clock Tower , visit the Husainabad Imambara and proceeding through the gateway, turn to the left and visit the Jami Masjid. By crossing the Hardinge Bridge and proceeding about ½ of a m beyond, Mohsin-ud-daula's *Karbala* can be reached ; it is 100 yds. from the high road. It is worth while, if there is time, to prolong the drive to the Musa Bagh, rather more than 2½ m N.W. of Husainabad

(3) Drive from the Junction Ry station, down the Cawnpore Road S. to the Alambagh, and then proceed N W up Victoria Street until the Nadan Mahal Road is reached Turn E down this road and visit the Nadan Mahal and the tomb of Ibrahim Chishti Then drive S.E down Sri Ram Road, passing Aminabad Park, and crossing the Cawnpore Road and La Touche Road, proceed down Hewett Road until it joins Abbott Road Drive E. along Abbott Road until the junction with Hazratganj , then drive S down Park Road past the Wingfield Park to the Martinière and then to the Dilkusha.

Manufactures. — Lucknow has never been an industrial centre.

The chief art products of the city are silverwork and clay models. An extensive trade is also carried on in copper and brass vessels and also in cotton fabrics "Bidri" (silver damascening on gun-metal) work will soon be a lost art. The **School of Arts and Crafts**, which is located in buildings on the river Gumti, opposite the Chhattar Manzil, is reviving and developing art industries

History.

The original centre of the city is believed to be the high ground crowned by the Mosque of Aurangzeb (p 458) on the right bank of the river Gumti near the Hardinge Bridge Here, on the spot known as Lakshman Tila, a family of Sheikhs from Bijnor, built a fort towards the end of the 13th century Lucknow was then included in the dominions of the Sharqi Kings of Jaunpur (1394-1476) and acquired its present name Its importance dates from the reign of Sher Shah of Delhi (1540-45) The traveller, De Laët, called it a *magnum emporium* in the days of Jahangir.

Modern Lucknow is largely the creation of the Nawabs of Oudh, afterwards known as the Kings of Oudh, a title accorded by the British in 1819 The first Nawab, Saadat Khan Burhan-ul-mulk (1732-39), who was originally a Persian merchant, was made Governor of Oudh in 1732 and became Wazir (minister) of the Empire His successor, Safdar Jang (1739-1753), lived principally at Delhi and is buried there (p 305). The third Nawab Wazir, his son Shuja-ud-daula (1753-75), who joined issue with the British at the battle of Buxar (p 60), resided at Fyzabad, and is buried there. His son, Asaf-ud-daula, removed the capital to Lucknow, which under him grew into a great city; the badge of the fish which appears on so many of the royal buildings is the mark of rank granted by the King of Delhi to the Oudh Nawabs. Of those who followed, it must suffice to say that, with the exception of Saadat Ali Khan, they were quite incompetent. In 1831 Lord William Bentinck in person warned the King, and in 1835 was authorised to assume the government, but suspended this step Apart from the two tombs in the Kaisarbagh and the Jami Masjid, none of their buildings possesses any real architectural merits, though the hall of the great Imambara is a very grand room

Asaf-ud-daula (1775-97) Built the Daulat Khana (on the banks of the river, of which only the Asafi Kothi remains), the great Imambara and its mosque, the Rumi Darwaza, Khurshid Manzil, the Banqueting Hall, which was the original Residency, and the garden pavilions at the Charbagh and Aishbagh He was a friend of Warren Hastings, and during his tenure the Court was visited by such painters of European reputation as Zoffany (a miniature painter), Ozias Humphry, and Thomas and William Daniell

Saadat Ali Khan (1798-1814), eldest brother of Asaf, was installed by Sir John Shore after the deposition of Wazir Ali (p 90) Built the Moti Mahal and Dilkusha, the Throne Room (Lal Baradari), and the King's Stables, also the Terhi Kothi and the Baillie Guard, as a guard-room for the Resident, Major John Baillie

Ghazi-ud-din Haidar, (1814-27), king of Oudh (1823) Built the Residency proper, the Kaisarbagh tombs, the Tomb at Shah Najaf, the Kadam Rasul and the Wilayati Bagh, and constructed

the canal on the S. side of the city. He lent large sums to the Hon E I. Company in 1825-26

Nasir-ud-din Haidar (1827-37) Built the Chhattar Manzils and the Tarawali Kothi.

Muhammad Ali Shah (1837-1842). Built the Husainabad Imambara and Tank, the Sat Khanda, the Jami Masjid, and the Badshahbagh

Amjad Ali Shah (1842-47) Built the Hazratganj Imambara, in which he is buried

Wajid Ali Shah (1847-56) Built the Kaisarbagh Palaces (1850) and Sikandarbagh In February 1856 he was deposed, and removed to Calcutta General James Outram, Resident at the time, became First Chief Commissioner of Oudh. The ex-King lived thirty years in Calcutta, and there he died in 1887, aged sixty-eight. Portraits of most of the Kings of Oudh will be found in the Baradari in the Clock Tower gardens fronting the Husainabad Tank (p 458)

The best books on the defence of the Lucknow Residency are perhaps Martin Gubbins' *Mutinies in Oudh* (1858), Lady Inglis' *Siege of Lucknow* (Osgood, 1893), Lieutenant-General M'Leod Innes' *Lucknow and Oudh in the Mutiny* (Innes, 1895), L E R Rees' *Personal Narrative of the Siege* (1858), and Sergeant Forbes Mitchell's *Reminiscences of the Great Mutiny* (Macmillan, 1904). Innes' book contains valuable views of the different posts in the Residency, and a number of photographs of the date of 1857-8 will be found in the first volume of Sir George Forrest's *History of the Indian Mutiny* (Blackwood, 1904)

An unusually good local guide is the one written by the late Mr E. H. Hilton, who, as a Martinière boy, shared in the defence of the Residency [1]

The Mutiny of 1857.

General Outram, the Chief Commissioner, had been compelled to take leave in May 1856, and Coverley Jackson acted until March 1857, when he was succeeded by Sir Henry Lawrence, a bare seven weeks before the outbreak of the Mutiny at Meerut and Delhi At that time the garrison of Lucknow consisted of three Bengal Infantry regiments (13th, 48th and 71st), the 7th regiment of Light Cavalry, two regiments of Oudh Infantry, a regiment of Military Police, and three Indian batteries of Artillery, in all about 7000 men, the European force consisted of H M 32nd Regiment (now the Duke of Cornwall's Light Infantry) under Lieutenant-Colonel Inglis, and one battery of Horse Artillery, less than 1000 strong

There had been a mutiny about cartridges of the 7th Oudh Irregular Infantry at the Musabagh on 3rd May Major Gall, commanding the 4th Irregular Cavalry, on being informed of the imminent danger of the European officers, galloped up to the vicinity with his troopers, and soon after Sir H Lawrence arrived with a mixed force The mutineers then broke and fled On 12th May (the news of Meerut and Delhi reached Lucknow 15th May) Sir H Lawrence held a darbar in the Cantonment Residency, when he harangued the troops and promoted two Indian officers who had given information of the intended outbreak The malcontents perceived that the Government was unable to take immediate steps to recover Delhi Sir H Lawrence quietly began to

[1] See also *Ordeal at Lucknow*, by Michael Joyce (John Murray, 1938)

collect supplies in the Residency and the Machhi Bhawan, and two Companies of H M.'s 32nd Regiment were placed in the Residency, into which the ladies moved on the 25th. The telegraph was still working

On the 30th May mutiny broke out in the Mariáon Cantonment, 3 m N E of Lucknow across the Gumti, and quickly became general Brigadier Handscombe was shot dead, and the mutineers attacked Sir Henry and his staff at the artillery ground, but were driven off with some rounds of grape On the 31st of May martial law was proclaimed, it was now decided that the supplies should be mainly placed in the Residency News of mutiny came in from every side — Bareilly on 31st May, Sitapur on the 3rd of June, Cawnpore on the 4th, and Fyzabad on the 6th — and on the 11th of June the police mutinied News of the Cawnpore disaster came on the 28th.

Large bodies of mutineers concentrated at Chinhat, a village lying 7 m from Lucknow, on the Fyzabad road, across the Kokrail nulla, and were attacked at Ismailganj, 1½ m W of this, by Sir Henry Lawrence on the 30th June with a small force of ten guns, 100 Sikh cavalry, and 550 infantry, of whom only 300 were British The troops started late and without having received any food The rebels fought with great confidence Finally the little force had to retreat with a loss of over 100 British soldiers and an 8-in howitzer The siege of the Residency began on the next day, 1st July. At midnight the Machhi Bhawan garrison fell back to the Residency, blowing up the magazine and destroying the guns there as far as was possible. On 2nd July Sir H. Lawrence was mortally wounded by a shell fired from the captured howitzer, and died two days afterwards Major Banks succeeded him in chief civil authority, and Colonel Inglis in command of the troops

The Siege of the Residency and the Reliefs

The Residency entrenchments were in shape approximately a diamond with sides about a quarter of a mile long (see map on p 454). At the N W corner was Innes' Post, on a spur which projected from the W front At the N.E corner was the Baillie Guard post, and along the E face were a number of posts on the high ground—Fayrer's, the Post Office, and Germon's, with Saunders' and Sago's in front of them The road to Cawnpore was on this side The S face had at its two ends Anderson's post and Gubbins' post, this front contained in a straight curtain the Cawnpore Battery, Deprat's, the Martinière post, the Brigade Mess and the Sikh square The enemy's position was not more than 30 or 40 ft distant along its entire length, (one of their most important posts was Johannes' house), but the ground was so covered with ruins that, although there was shelter, there were no facilities for movement The W. face lay between Gubbins' and Innes' posts, and consisted of three ranges of Residency outhouses, and then the church and cemetery Evans' Battery on the high level flanked the S side of Innes' post, and Innes' post flanked the whole of this W. front which, except at that post, was never seriously attacked

On the 2nd of July the rebels attacked the Baillie Guard Gate At first the deaths averaged from fifteen to twenty daily, many being killed by an African, who fired from Johannes' house without

ever missing On the 8th Captain Mansfield and three other officers and Maycock, a civilian, sallied out, spiked a gun, and killed about forty of the rebels without losing a man. On the 9th another sortie was made, when O'Keene, a private of the 32nd, spiked a gun On the 10th, the ammunition of the rebels' cannon falling short, they began to fire pieces of wood, copper coin, iron, and even bullocks' horns · The old State guns had been collected on the low ground under the Redan and there was no arsenal in Lucknow from which the mutineers could obtain gun ammunition. On the 14th the enemy made a general attack On the 16th they made a night attack on Gubbins' Battery, but were beaten back. On the 20th of July they exploded a mine near the Redan, attempted to storm the Baillie Guard, and made their first general assault at every point, with volleys of musketry, and heavy shelling The mine did no harm to the Redan Battery, but the enemy rushed up the glacis with fixed bayonets Grape-shot made huge gaps in their ranks, a musket ball killed their leader, and they then retreated At the same time a furious attack was made on Innes' outpost, where Lieutenant Loughnan, of the 13th Bengal Infantry, with 24 English soldiers, 12 civilians, and 25 sepoys, beat back the attackers At Saunders' and Sago's Posts a column of rebels with a green standard was, after some hours' hard fighting, beaten off, with the loss of all their commanders and about 60 men The fight ended at 4 P M

Though repulsed at all points, on the 20th the enemy maintained a cannonade, and planted new batteries The windows of the houses within the Residency had to be barricaded, and even then inmates were shot inside them Flies swarmed in incredible numbers, the ground being black with them. On the 25th July a letter was received from the Quartermaster-General of General Havelock's force bidding the besieged to be of good cheer, as a large relieving force was coming But days passed and the rebels were busy with their mines, and but for the countermining by Captain Fulton, of the Engineers, the place must have fallen H.M. 32nd was a Cornish Regiment

On the 10th of August a second general attack was beaten off. On the same day a mine was exploded at Sago's Garrison, which destroyed some outhouses Another mine between the Brigade Mess and the Cawnpore Battery demolished a stockade, and the enemy attempted to enter, but were repulsed The 8-in howitzer which the rebels took at Chinhat played on Innes' Post with great effect On the 14th Capt Fulton exploded a mine under a house near Sago's Garrison, killing 50 to 60 of the enemy On the 18th the second Sikh Square, garrisoned by 15 Christian drummers and musicians and 15 Sikhs, was blown up by the rebels A large breach was made, and the enemy delivered their third home assault, which was the nearest of all to being successful, but their leader was killed, and they retired. Captain Fulton, with a number of volunteers, then sallied out, destroyed a number of houses, and blew up the shaft of another mine begun by the rebels

On the 21st August the house called Johannes' was blown up by Captain Fulton, and 60 to 80 of the rebels were killed Captain Fulton then headed a sally, and after driving out the insurgents from several buildings, blew them up. Captain M'Cabe, of the 32nd, headed another party, and spiked two guns. Previous to this M'Cabe had attacked Johannes'

house and bayoneted a number of the enemy, who were found asleep, and amongst them the African who had been christened by the soldiers "Bob the Nailer."

On 28-29th August, Angad,[1] a spy, brought a letter from Cawnpore saying that the relief would take place in three weeks On the 5th of September the enemy made their fourth and final attack, having previously exploded three mines They advanced boldly to the Brigade Mess, but were driven back with loss They then attacked the Bailie Guard and several other places, but were similarly repulsed On the 14th Captain Fulton was killed at Gubbins' Battery by a 9-pound shot[2] On the 23rd of September a cannonade confirmed news received the day before of the approach of Generals Outram and Havelock On the 25th smoke and musketry fire showed that street fighting was going on The relievers finally entered the entrenchments in the evening of the 87th day of the defence

General Havelock, who had reached Cawnpore (p 431) on the 17th July, and had destroyed the palace at Bithur on the 19th, crossed the Ganges, and advanced towards Lucknow on the 25th, with only 1200 men, and fought two actions at Unao and Basiratganj on the 29th, but lost one-sixth of his force, and was compelled to fall back on Mangalwar Advancing once more, he defeated the enemy again severely at Basiratganj on 4th August, but again had to retreat to Cawnpore; before doing so he beat the enemy a third time at Basiratganj Three days after his return to Cawnpore he drove a new force of rebels out of Bithur on 16th August On the 18th September sufficient reinforcements arrived to enable him and General Outram (who had joined the force meanwhile, but chivalrously waived his command in favour of General Havelock) to cross the Ganges again with 3000 men. On the 21st he defeated the enemy again at Mangalwar, and on the 23rd at Alambagh, where the news of the capture of Delhi reached him

The flooded state of the country across the Gumti made it impossible to move guns and so effect the relief of the Residency from the left bank, so the force moved by way of the Charbagh (where the Junction railway station now is) in front of which sharp fighting took place at the Yellow House[1] Crossing the canal and leaving the 78th on the Charbagh bridge, the troops followed the line of the canal to the old barracks of the 32nd (now Lawrence Terrace), just to the N. of the E end of Hazratganj, passed on to the Sikandarbagh, and then followed the road past the Shah Najaf to the Moti Mahal, with little opposition At the Moti Mahal they came under heavy fire from the Khurshid Manzil and from a battery at the corner of the Kaisarbagh But the 78th Highlanders had gone up Hazratganj to the left of the main column, and took the battery in the rear, and the united column pushed on to the Chhattar Manzil Palace still under heavy fire At the corner of this palace was the Khas Bazar, afterwards known as

[1] He was still living in 1876, and was presented to King Edward VII., then Prince of Wales

[2] He was "The Defender of Lucknow, and was the heart and soul of the contest so long and energetically waged against such fearful odds."—Sir Joseph Fayrer's *Narrative*.

[1] It was here that Captain William Olpherts, R.A., greatly distinguished himself and won the Victoria Cross. When a man of the dauntless courage of Sir James Outram records of the deed by which the reward for exceptional valour was won, "Bravery is a poor and insignificant epithet to apply to a valour such as yours," his name ought not to be forgotten by Englishmen.

the Dhooly Square, in which a consultation took place, and during this Brigadier-General Neill was shot through the head while seated on his charger in a gateway (the Sher Darwaza) The decision having been for an advance, the troops issued from the square and turned to their right towards the Residency The Highlanders and Sikhs, who took the farther road to the Khas Bazar, suffered considerably, the rest of the force took the nearer road into the Paimbagh (where the Chief Court building now is), and, passing E of the old Jail (where the District Judge's Court stands), took a battery of the enemy in the rear with but little loss Both columns, uniting once more by the Clock Tower, entered the Residency Gate and relieved the beleaguered garrison The heavy guns and the wounded remained for the night at the Moti Mahal

When the wounded were being brought in next day the dhooly-bearers were by mistake led into the Khas Bazar square instead of directly into the Chhattar Manzil, and came under heavy fire of the enemy Deserted by the bearers, the wounded were heroically defended by Surgeon Anthony Dickson Home and a few privates, who held one position after another, and were finally rescued from the Residency after all hope was lost for this deed of valour the surgeon and three privates received the Victoria Cross

This relief was not, however, effected without most serious loss, 2000 soldiers had reinforced the garrison, but 550 officers and men were killed and wounded The relieving generals took possession of the Terhi Kothi and the Farhat Bakhsh Palace, as also the Chhattar Manzil Palace. Although the garrison could extend their positions, Generals Outram and Havelock, with their troops, were themselves besieged. On the 26th of September a sortie was made, two mortars were spiked and a powder magazine blown up Captain Lowe brought in as trophies an 18-pounder, a 9-pounder and five smaller guns. After this the garrison frequently took the offensive, and captured several positions Attempts by Colonel Napier, Chief of Staff, to open communications with the Alambagh, where the relieving force had left their baggage and ammunition, failed, an intervening mosque being strongly fortified The besieged now repaired their defences, and extended them near Innes' Post by taking and fortifying a mound, which became one of their strongest positions Desultory fighting went on incessantly, and the palaces in the extended position continued to be the object of severe attacks Rations had to be reduced from 2nd October

On the 10th of November Sir Colin Campbell[1] reached the Alambagh, and relieved the garrison besieged there His force consisted of 4500 men, with which he had to meet 30,000 to 40,000 trained rebels, and many irregular volunteers Thomas Henry Kavanagh, an uncovenanted officer who had distinguished himself in several sorties, offered to carry despatches from Sir James Outram at Lucknow to Sir Colin Campbell at the Alambagh, and with the help of an Indian succeeded, for which he received the Victoria Cross. After a reconnaissance towards the Charbagh to deceive the enemy, Sir

[1] Sir Colin Campbell, then in his sixty-fifth year, left England on 11th July, and reached Calcutta on 13th August. There he was detained forwarding troops and making arrangements till 27th October On 1st November he reached Allahabad, and on 3rd November arrived at Cawnpore, and on 9th November left that place to join the force already well on the road to Lucknow.

Colin left his baggage in the Alambagh and proceeded to the Dilkusha, in which movement his advanced guard encountered a heavy fire, but drove the enemy past the Martinière College. On the 12th an attack of the rebels was repelled, on the 14th the rear-guard joined, and on the 16th the whole force, except the 8th Regiment, left to guard the Dilkusha, advanced against the Sikandarbagh After a fierce conflict the 4th Punjab Rifles, the 93rd Highlanders, and the 52nd, broke into the enclosure

While this fight was raging the troops suffered much from a murderous fire directed upon them from the Shah Najaf Tomb This place was next attacked by Peel's Naval Brigade and the 93rd, and finally the enemy abandoned it The troops then rested for the night, throughout which they were fired on continually On the 17th the Khurshid Manzil — which had been used by Her Majesty's 32nd as a mess-house — a large, two-storeyed, *flat-roofed house*, was stormed In the afternoon Generals Outram and Havelock, who had occupied the Hiran Khana outside the Chhattar Manzil, crossed the open space by the Moti Mahal to the mess-house, met Sir Colin Campbell there, and the relief of Lucknow was finally effected on the 140th day ("Lucknow Day," 25th September)

The British loss was 540 killed and wounded Sir Colin decided that the garrison, as well as the sick and wounded, women and children, should be withdrawn from the Residency to the Dilkusha, the enemy being deluded, meanwhile, by the capture of Banks' House (now Government House) and a heavy bombardment of the Kaisarbagh This was completed on the 22nd, without any casualties among the women and children, the enemy continuing to fire into the old positions long after they had been abandoned The Oudh State guns were destroyed

On the 24th November General Havelock died of dysentery at the Dilkusha, and was buried next day in the Alambagh, to which the whole force fell back On the 27th the convoy of the sick and women and children (of whom 4 were alive in 1943) started for Cawnpore General Outram was left at the Alambagh with a force finally made up to 3500 men and 25 guns

The Recapture of Lucknow.

Sir Colin returned in March 1858, before which time six attacks had been made on the British position (which lay across the Cawnpore Road slightly in the rear of the Alambagh), and beaten off The forces which Sir Colin Campbell brought with him for the recapture of Lucknow consisted of 17 regiments of infantry, 28 squadrons of cavalry, and 134 guns—in all 20,000 men—and a Nepal army (6000) under Sir Jang Bahadur and General Franks, from Benares, while the numbers of the enemy were 100,000, and the guns planted on their triple line of defence 100 On the 2nd of March the army moved from the Alambagh to the Dilkusha, and on the 6th a force under General Outram crossed the Gumti to operate from the left bank This turned the first line of defence along the old canal, and it was abandoned by the mutineers on the 10th Captain Butler, who swam across the Gumti to inform the force on the right bank of its abandonment, received the Victoria Cross No opposition was offered either at the Sikandarbagh or Shah Najaf, which were occupied next day.

On the 10th March the advance on the enemy's right began by the seizure of Banks' House,

which was followed up on the 11th by the capture of the Begam Kothi, by the 93rd and 4th Punjab Rifles, where Major Hodson was killed. On the 14th the Hazratganj Imambara, up to which a way had been sapped through the houses, was seized, and the right of the enemy's second line of defence, which ran from here past the Tarawali Kothi and Khurshid Manzil to the river E. of the Moti Mahal, was thus turned. A party of the Highlanders and the 10th Regiment, boldly pushing on, established itself in a palace commanding the Kaisarbagh enclosure, round which the last line of defence had been drawn, and was at once supported by Generals Franks and Napier. The enemy abandoned their position, and fell back into the city.

On the 16th General Outram, who had been held back by the Commander-in-Chief, crossed the Gumti and occupied the Residency and the Machhi Bhawan, and on the next day the Husainabad Imambara. On the 18th he took the Musabagh, but the enemy got away to maintain the struggle in Oudh and Rohilkhand for a whole year.

The Residency

The **Residency** is entered on the E. side by Neill Road at the famous Baillie Guard Gate, and the path then leads directly to the Residency between the Banqueting Hall on the right and Dr Fayrer's house on the left. The gate was banked up with earth inside during the siege, and Generals Havelock and Outram entered through the embrasure of Aitken's Battery to the right. When the evacuation of the Residency on 22nd November 1857 was carried out, the doors of the gate were closed by Colonel Inglis as soon as Sir James Outram had passed through them.

The **Baillie Guard** was partly used as a store-room, and partly as barracks for the garrison. In the Southern angle was a concave-shaped guard-house, removed after 1857. Inside the Baillie Guard is a tablet in memory of the Indian officers and men of the 13th B.I., who held the post, and whose commander, Lieut. Aitken received the V.C. for six citations, a private of H.M. 84th had twelve. In front is a memorial erected by Lord Northbrook to the loyal Indian sepoys, numbering 700, who shared in the defence. The foundation-stone of it was laid by King Edward VII., then Prince of Wales, on 7th January 1876.

Immediately inside the Gate, to the right, is the **Treasury**, which was used for the manufacture of Enfield cartridges. Next to this is the **Banqueting Hall**, now roofless and ivy-grown, which was turned into a hospital. On the left of the Baillie Guard Gate are the ruins of **Dr Fayrer's House**.[1] A tablet on the wall of an inner room, visible from the pathway, commemorates the spot where Sir H. Lawrence died on the 4th July.

The house was occupied on the first relief by Sir James Outram and his staff. In the subterranean rooms, or "tai-khanas," here and at the Residency and the Begam Kothi, most of the women and children were protected.

On the lawn in front of the Residency is a marble runic cross inscribed.—

In memory of
MAJOR-GEN. SIR HENRY LAWRENCE,
K.C.B.,
And the brave men who fell
In defence of the Residency,
1857

To the W. is an obelisk of Cornish granite erected in 1899 in

[1] Dr (afterwards Sir Joseph) Fayrer was the Residency surgeon. He revisited Lucknow in 1876 as a member of the staff of the Prince of Wales (King Edward).

memory of the officers and men of H M. 32nd Regiment by the 1st Battalion of the Duke of Cornwall's Light Infantry, their successors, who were at that time again quartered in Lucknow after forty years It was unveiled by Lady Inglis, the widow of Sir John Inglis, who was with her husband during the siege A detachment perished at Cawnpore (p 431) with the women and children of the regiment The names of Case, Moore, M'Cabe and Webb, which are inscribed on the obelisk, have been mentioned in this narrative.

To the S E of the Residency building is a memorial erected in honour of Major-General Sir John Inglis, K C.B (died 1862) by his surviving comrades and friends in 1894. On the other side of the Residency, and S of the cemetery, is a monument erected in 1883 by the 2nd Battalion of the Seaforth Highlanders, in memory of the officers and men of the 78th Highland Regiment, who fell in the years 1857 and 1858 The regiment was with Havelock in his advance and relief and fought subsequently in all the Lucknow operations up to the recapture by Sir Colin Campbell. To the N and S of this monument are 68-pounder guns bearing the word "Shannon" These belonged to Sir William Peel's Naval Brigade, which broke down the defences of the Shah Najaf and the Martinière during Sir Colin Campbell's final operations in 1858

The ***Residency Building*** *(built* 1800) is almost ruined, but it is possible to ascend the staircase of one of the towers Upon the other throughout the siege the Banner of England floated, and was flown, day and night, in tribute to the dead, until 15th August 1947

The entrance to the Residency is on the W by a modern portico. In a room on the ground floor, which has been fitted up as a **Museum**, is a model of the entrenched position as it was in July 1857. The original (at Bristol) was constructed by the Rev T. Moore, who was chaplain at Lucknow from 1871 to 1874, and exhibits a wholly different scene. (See also plan opposite p 454) In 1857 the position was commanded by neighbouring houses (now completely *swept away), so close that they* were separated from the defences by narrow lanes and hastily improvised trenches and barricades These houses were filled with sharp-shooters Sir Henry Lawrence hardly expected to hold out without relief for more than fifteen days.

In the entrance hall of the Residency, a marble tablet tells the story of those eighty-seven days *Lord Canning, it reminds* us, expressed his admiration of the defence in the following words "There does not stand recorded in the annals of war an achievement more truly heroic."

At the top of the steps leading down to the *tahkhana* or underground rooms, in which the women and children were lodged, is a tablet in memory of Lady Inglis, who died in 1904 She was the daughter of the first Lord Chelmsford, who was Lord Chancellor in 1858-59 and 1866-68, and was therefore the aunt of the third Lord Chelmsford, who was Viceroy from 1916 to 1921. Rees in his *Personal Narrative* relates that when the Residency was evacuated, the ladies had to walk six miles. Lady Inglis walked with them and refused to use the dhooly which had been prepared for her There is no mention of this incident in her own published diary

A tablet on the E veranda

wall of the Women's Quarters records the death during the siege of Miss Palmer, the young daughter of Col. Palmer of the 48th B.I., who was in command at the Machhi Bhawan. She was killed by a cannon ball on the 1st July.

On the first storey in the N.E. angle of the building is the room in which Sir Henry Lawrence received his fatal wound on the morning of the 2nd July. Advised to abandon the room after a shell had burst in it on the previous day, he refused, saying that the enemy's gunners were not good enough to put a second shell in the same room. He was taken to Dr Fayrer's house, and there he died. A plunge bath in the basement was filled with grain.

The Residency lay in the centre of the position S. of the river front and W. of the Banqueting Hall. It afforded accommodation to nearly 1000 persons—men, women, and children. The N. or river front in 1857 faced a row of buildings forming a street which was known as Captain Bazar. In the centre of the N. face was the **Redan**, armed with two 18-pounders and a 9-pounder, which commanded the whole river-side and the opposite bank; on its W. side was Evans' Battery, with one 18-pounder and two 9-pounders. Just E. of the Redan was the **Water Gate**, beyond which a defence of fascines and sandbags ran to the Hospital, formerly the Banqueting Hall, the Water Gate had a battery of three guns, with Alexander's Battery on its right, and the Hospital one of three mortars. At the N.W. corner, on a spur, running out above the depression in which the church and graveyard were situated, was **Innes' Post**, the bungalow of Lieut. M'Leod Innes of the Bengal Engineers (afterwards a Lieut.-General and V.C.).

The **Cemetery** round the ruined **Church** lies to the E. of Innes' Post. Here Sir Henry Lawrence, Brigadier-General Neill, and men and women and hapless children, to the number of nearly 2000, sleep. General Neill's grave is on the S. side of Sir Henry Lawrence's, which is enclosed by an iron railing, and bears his own epitaph —

Here lies
HENRY LAWRENCE,
who tried to do his duty
May the Lord have mercy on his soul!
Born 28th of June 1806.
Died 4th of July 1857

On his grave every day a fresh bunch of flowers is placed.

We now come to the W. front of the defences and the **Slaughter House** and **Sheep House Posts**, the latter immediately S. of the church depression. Next in order are **Grant's Bastion**, **Gubbins House** (the residence of Mr Martin Gubbins, the Financial Commissioner) and **Gubbins' Battery**, with a 9-pounder, which defended the S.W. angle. The S. portico of Gubbins' House was commanded by the famous "Lane Gun," behind the house of the younger Johannes. Between Gubbins' House and the Begam Kothi, and S. of the Residency lawn, was **Ommanney's House** (the residence of Mr M. C. Ommaney, the Judicial Commissioner, who was killed on the 5th July in the Redan). General Havelock made this house his headquarters after the first relief and used every morning to walk from here round the whole entrenchment. Under a banyan tree near the gate is the grave of Rukn-ud-daula, a son of Sa'adat Ali, who was suspected of correspondence with the mutineers, and with four other prisoners was confined in one room on the N. side of the Banqueting Hall. The **Begam Kothi** was so called from having been the residence of a European

wife of a King of Oudh, and is distinguished by its mosque. It sheltered many women and children and escaped serious injury.

The entrenchment turns sharply inwards at Grant's Bastion, and on the other side of a narrow lane, which was closed and protected by a 24-pounder howitzer, were the **Sikh Squares** and the **Brigade Mess** (or King's Hospital) In the Brigade Mess buildings were the rooms occupied by Mrs Inglis and Mrs Couper E. of these are **Duprat's Post**, held by a brave French merchant who had served with the French Army in Algeria, and behind it the **Martinière Post**, in front, outside, at a distance of only 30 yds, was **Johannes' House** He was an Armenian merchant Four mines of the enemy were exploded between Duprat's Post and the S W. corner of the Sikh Square. Behind the Martinière *Post was the Indian Hospital, and* at the rear of Duprat's House was the **Thagi Jail**, which was used as a convalescent depot.

At the S.E corner were **Anderson's Garrison** and the **Cawnpore Battery**, mounting an 18-pounder and two 9-pounders, these were the two most dangerous posts, being specially exposed to the fire of Phillips' Garden Battery [1] The well still exists from which a counter-mine was run and exploded with 20 enemy casualties

The **Post Office**, a very important position, commanded the jail and mosque to the right, and the Clock Tower and offices of the Terhi Kothi to the left, outside the entrenchment, and was armed with three guns. It was the headquarters of the Artillery and the Engineers. In front of it, on the part of the E. face projecting beyond the line of the Baillie Guard were the **Financial Garrison (Saunders' Post)**, **Sago's Post** (so called from the owner of the house here, a schoolmistress), and the **Judicial Commissioner's Garrison** or **Germon's Post** All these posts are marked on the ground by memorial pillars, which mark the outline of the defences The posts to which the men of the 32nd were attached were · The Redan, the Cawnpore Battery and the Slaughter-House Post The 71st and 48th Bengal Infantry defended the Hospital Post; the 13th B I the Baillie Guard,[1] the Sikh Infantry Germon's Post, and the Sikh Cavalry the Sikh Square

All the other posts were held by a combination of English and Indian soldiers and volunteers, about thirty to each post The Brigade Mess Post was garrisoned by British officers, many of whom had rifles At the commencement of the siege, on the 30th June, the garrison consisted of 730 British soldiers (600 of His Majesty's 32nd Regiment, a company of His Majesty's 84th, and a handful of artillerymen), 76 British officers and 54 Indian officers, 150 civilian volunteers and 700 sepoys (of whom 250 were from the 13th Bengal Infantry, 43 from the 48th, and 117 from the 71st), making a total combatant force of 1480 officers and men manning 200 yards of front [2] The non-combatants

[1] The site of this Battery, which was captured on the 25th October, is now occupied by the Balrampur Hospital Opposite to it, on the W., is the Lady Dufferin Hospital for Women, which was opened by H.R.H. the Duke of Clarence on the 18th January 1890.

[1] The loyal remnants of the 13th, 48th and 71st Bengal Infantry were suitably rewarded and formed in 1861 into the "Lucknow Regiment," now the 10/7th Rajput Regiment

[2] Colonel John Bonham, C B, of the Bengal Artillery, the last surviving officer of the garrison, died in Ireland on the 18th May 1928, in his ninety-fourth year When King George and Queen Mary visited Lucknow in 1905, he heaued the small body of survivors who met their Majesties, and described the events of the siege. He was wounded three times The heroic efforts made by him at the battle of Chinhat to save his howitzer would, says Col Malleson in his *History*, have gained for him the Victoria Cross, if Sir Henry Lawrence had lived. But it was a shell from this very howitzer which killed Sir Henry

numbered 2763; 237 women, 260 children, 50 boys from the Martinière School (p. 456), 27 Europeans and Anglo-Indians, and 700 Indians On the 25th September, when the first relief was effected by Havelock and Outram, there remained 979 persons, of whom 577 were Europeans and 402 were Indians. The 32nd Regiment was reduced to 250 men, 170 or nearly half their casualties had occurred by the end of July

The Quarters S and E. of the Residency connected with the Reliefs

The buildings and sites to the E of the Residency are connected with the reliefs by Sir Henry Havelock and Sir Colin Campbell 150 yds. in front of the Baillie Gate, on a culvert near the intersection of the roads, a small brick pillar marks the site of the **Lutkun Darwaza**, or **Clock Tower**, from which the enemy kept up a constant fire on the E of the Residency. Farther on, to the right of Mill Road, was the Jail, where the Court of the District Judge now is, while standing at a greater distance back on the left are the **Terhi Kothi**, now the residence of the Chief Judge of the Oudh Chief Court, and the **Farhat Bakhsh** ("Delight-giving") Palace This name included also the Chhattar Manzil (1827-37), which constituted the ladies' apartments so long as the Farhat Bakhsh was the principal residence of the Oudh rulers—from Sa'adat 'Ali Khan down to Wajid 'Ali Shah

S E of the Jail was the **Pain-bagh** (now the Chief Court), E of which projected the S portion of the Chhattar Manzil enclosure, containing the small Chhattar Manzil, the Kasr-i-Sultan, or the Lal Baradari, and the Darshan Vilas. In 1857-8 these buildings were all enclosed and divided off by high walls of great strength.

Both the **Chhattar Manzils** are surmounted by an umbrella (*chhattar* or *chhattri*), whence their name. The larger, on the bank of the river, is used now as a club, and the smaller as Government offices After the relief by General Havelock, the British position was extended from the Residency eastwards as far as the Chhattar Manzil Near this, opposite the Kaisarbagh, is the marble memorial statue of the Queen-Empress Victoria under a canopy The **Kasr-i-Sultan** was the throne-room in which the widow of Nasir-ud-din Haidar attempted to compel the Resident, Colonel Low, to place her son, born before the King married her, on the "masnad" Its other name, Lal Baradari, is due to the colour of the material, red sandstone, of which it is constructed.

N of the Telegraph Office is the **Sher Darwaza** gateway of the Dhooly Square, where General Neill was killed on 25th September 1857 At this spot a masonry pillar has been erected, bearing a tablet with a suitable inscription and the words, *Dulce et decorum est pro patriâ mori*

E again, opposite the N E corner of the Kaisarbagh, was the **Hiran Khana**, or Deer House, between which and the river and the road to the modern Bruce Bridge were the engine-house, stables, and sergeants' house, all of which played a part in the reliefs Neill Road, which has been followed to the Sher Darwaza, now continues to Hazratganj past the N. front of the Kaisarbagh and the **Memorial** in front of the N. gate which marks the spot where two small parties of European refugees from Sitapur were shot on 24th September and 16th November

The fine stone tombs of Sa'adat Ali and his wife in the **Kaisarbagh** were constructed by his son, Ghazi-

ud-din Haidar; and the palace was built between the years 1848 and 1850 by Wajid 'Ali Shah. From the fire from the defences of the palace and the roofs of the tombs the relieving force suffered much in finally reaching the Residency, both in September and in November 1857. The building to the S. of the tombs was used at one time as the Provincial Legislative Council Chamber. It was erected to accommodate the Canning College (now at Badshahbagh, p. 457). The palace originally had one gate at the S.E. and two others on the N. and S. and its interior was divided into courts. The open square is still surrounded, except on the N. side, by double-storeyed buildings, made over to the Talukdars of Oudh. In the centre is a white-washed baradari, which is used as a hall for meetings of the Talukdars. It contains a portrait of King Edward, presented by him on the occasion of his visit in 1876, and statues of Maharaja Man Singh, Colonel Lousada Barrow (Chief Commissioner of Oudh in 1860), Lord MacDonnell, Maharaja Sir Digbijai Singh of Balrampur (the donor of the building), and Sir John Woodburn; the two last are by Sir W. Goscombe John, R.A.

S.W. of this central Baradari is the **Public Library**, erected by the Maharaja of Mahmudabad (a prominent Moslem Talukdar) in memory of his father. The entrance from the E. and W. is made by the *Lakhi Gateways*, so called from the lakh of rupees which their erection cost. Outside the W. gateway is the **Kaisar Pasand** (now used as the Deputy-Commissioner's Court), which was built by Roshan-ud-Daula, the minister of Nasir-ud-din Haidar. On leaving the central courtyard by the E. gateway, Hazratbagh is entered: the *Chaulakhi*, the large pile on the right, was built by Wajid Ali's barber, and sold to him for four lakhs: hence the name. Much of the concealed jewellery of the ex-King was taken from the Kaisarbagh to the Residency in May 1857, and most of it disappeared.

In the Lal Baradari (the building between the Chhattar Manzil and the Chief Court) is the Provincial **Museum**[1] (1863); the archæological section is the most important. The large hall contains sculptures, the majority from Mathura (Muttra), which are partly Buddhist and partly Jain. The adjoining room is reserved for Brahmanical sculptures from different parts of the Province.[2] A special room has been set apart for the antiquities excavated on the site of Saheth-Maheth (p. 421), the ancient city of Srávasti, and the famous convent of the Jetavana. Some objects from Kasia (believed to be the ancient Kusinagara, where the Buddha entered Nirvána) are also exhibited separately. The epigraphical section contains numerous Sanskrit inscriptions both on stone slabs and on copper plates. The important coin collection is only shown to visitors on application to the Curator. The Museum contains also a zoological section, which includes a good collection of stuffed birds. Part is in the Kaisarbagh.

Proceeding now by Clyde Road, the first building seen on the left is the **Moti Mahal**, with Martin's House,[3] between it and Bruce's Bridge.[4] It is situated on the bank of the Gumti. The three-storeyed gateway on the S. col-

[1] Closed on Fridays.

[2] See No. 11, *Memoirs Arch. Surv. of India*, 1922, by Pandit Hirananda Shastri.

[3] Simon Nicolson Martin was Deputy-Commissioner of Lucknow in 1857.

[4] Sixty yards E. of this bridge, which was built in 1863, was the Bridge of Boats, over which the mutineers escaped after Havelock's capture of the Moti Mahal.

lapsed during the floods of 1923, and has been replaced by a fine Italian wrought-iron gate; the old walls are also gone, and a railing now surrounds the enclosure. The building itself is two-storeyed, of a blue colour, and surmounted by a gilt pinnacle. Originally it comprised also the Mubarak Manzil and the Shah Manzil, from which the King used to watch the fights between wild animals on the farther side of the river. The Moti Mahal was built by Sa'adat Ali, and the other two by Ghazi-ud-din Haidar. At the Moti Mahal General Havelock's rear-guard remained on 25th September, and Sir Colin Campbell's force came into actual touch with the besieged on 17th November. A memorial to H.M. 90th Regiment stands in the enclosure.

To the right of the road, on a high site, the base of which is still surrounded by defensive works, is the **Khurshid** ("Sun") **Manzil** built by Sa'adat Ali and named after his wife. It was used before the Mutiny as the Mess-house of the 32nd, and since 1876 has been occupied by the Girls' Martinière School. S. of it again is the **Tarawali Kothi**, or Observatory. This was built by Nasir-ud-din Haidar for his Astronomer-Royal, Colonel Wilcox. During the relief of November 1857 the Khurshid Manzil was strongly held by the enemy, but, after being subjected to bombardment by the Naval Brigade and Mortar Battery for three hours, was taken by the 53rd and 90th. A marble tablet at the S.W. corner of the garden wall records that, about twenty paces away, was the gap through which Generals Outram and Havelock passed to meet Sir Colin Campbell on the 17th November 1857. In March 1858 the enemy's second line of defence ran from the river at the Moti Mahal, past the Khurshid Manzil and Tarawali Kothi, to the Chota (Hazratganj) Imambara.

500 yds. E. of this line stand the Shah Najaf and Kadam Rasul, and nearly 1000 yds. on again lies the Sikandarbagh, round which desperate fighting took place in November 1857. **Shah Najaf** (named after the scene of the martyrdom of the Caliph Ali, 120 m. S.W. of Baghdad) is the tomb of Ghazi-ud-din Haidar Khan. It is surmounted by a dome, and has walls of such immense thickness that neither the heavy guns of the Naval Brigade nor those of Captain Middleton's Battery, brought quite close up, were able to make any impression on them. Some soldiers of the 93rd managed to scramble up a broken part of the wall at the back, and found that the enemy had just fled. Some of the defenders made use of bows and arrows—for the last time, probably, in Indian warfare. Sergeant Paton received the Victoria Cross for the part he took in this escalade. One picture (copied by an Indian artist from Zoffany's famous picture) represents a cock-fight, at which the King of Oudh and General Claude Martin are present. The building is illuminated during the Muharram festival.

The **Kadam Rasul** is a ruined building of red brick. It was built in 1830 and was used by the mutineers as a powder magazine. The stone, with an imprint of the Prophet's foot which it contained, disappeared in 1857; it is approached by a path through the garden to the E. of Shah Najaf. Between the Horticultural Gardens and the **Sikandarbagh** a road leads to the bridge across the river. The gateway of the garden, which is 120 yds. square, still stands; in front of it was a sarai, which was easily captured on 16th November 1857.

but a breach [1] in the thick wall of the Sikandarbagh was made only with great difficulty, and was carried by the 93rd, 53rd, and the Sikhs of the 4th P.I. The defenders, upwards of 2000 men, and forming a compact brigade of three regiments, were killed to a man. "Never was a bolder feat of arms," wrote Sir Colin Campbell of it. The 93rd lost 90 killed and 99 wounded; the dead were buried in a trench, still marked by a mound to the E of the gate None of these three posts were held by the enemy in September 1857, and all of them were abandoned with the first line of defence in March 1858 From the Sikandarbagh the lines of the two reliefs and the capture diverge Sir Colin Campbell's two advances were made from the Martinière and Dilkusha, to the S E of the Wingfield Park, while Generals Havelock and Outram pushed up to the Sikandarbagh from the S, along what is now known as Outram Road, which passes N of the Wingfield Park and S. of the **King's Chaupar**, or Cross Stables (now Lawrence Terrace), which were used before the Mutiny as barracks for the 32nd Regiment

Just before the junction with Banks Road is the **Legislative Council Chamber** with the Provincial coat of arms To the S of it is Government House, formerly Banks' House, and originally the Hayat Bakhsh ("life-giving") Kothi. The Hayat Bakhsh was occupied after the annexation of Oudh by Major Banks, the Commissioner of Lucknow, who was killed in the Residency. Major Hodson died here after receiving a fatal wound at the Post Office (Begam Kothi). It dates from the time of Sa'adat Ali Outram Road now joins Havelock Road, which marks up to the Charbagh (Railway station) the route along the canal followed by the troops in their advance from the Cawnpore Road on 25th September 1857

At the junction of Park and Abbott Roads is *Christ Church* There are a number of interesting tablets on the walls Those in memory of Sir James Outram and Sir H Lawrence deserve particular attention

Wingfield Park is adorned with white marble pavilions and statues, and has a large pavilion in the centre, surrounded by 80 acres of grounds and flower-gardens It is named after Sir C Wingfield, Chief Commissioner of Oudh (1859-66)

Hazratganj, leading N W, was the route of the rear-guard in September 1857, when, after holding the Charbagh Bridge for several hours, it marched to join the main column in advance of it On the left side is the old Post Office in the Sultan Inaiyat, a portion of the **Begam Kothi** property—once the residence of a Queen of Amjad Ali Shah—taken with much slaughter on 11th March 1858 Here Major Hodson was mortally wounded.

S of the Post Office is the **Dar-us-Shafa Kothi**, now occupied by the Secretaries to Government It takes its name ("House of Healing") from the fact that from 1822 to 1844 it was used as a hospital.

Then comes the **Chota Imambara** or **Hazratganj Makbara**, the tomb of Amjad Ali Shah, which was captured on 14th March 1858, turning the whole of the enemy's

[1] According to Sergeant Forbes Mitchell, the breach in the wall of the garden, which was wide enough to admit three men abreast, was made at the spot where the road to the river now passes through it, and the 53rd got into the enclosure through a window to the right of the gate Private Dunlay of the 93rd received the Victoria Cross as the first man who penetrated into the garden and survived the conflict in it

lines of defence Until the completion of Christ Church in 1860, Anglican services were conducted here Beyond the Imambara is the high-standing **Nur Baksh**, ("light-giving") **Kothi**, now the official residence of the Deputy-Commissioner of Lucknow From the roof General Havelock worked out his way to the Residency A little farther N the S E corner of the Kaisarbagh and the Memorial in front of it are reached

The Quarters & of Wingfield Park connected with the Reliefs

The scenes of the operations of the relieving forces before Lucknow may now be completed by a visit to the Martinière, the Dilkusha, and the Alambagh, the original base of both of the reliefs A road, striking off to the left from Park Road (which is a continuation of Hazratganj, and skirts the W side of the Wingfield Park), leads through the Martinière Park. In one of two small grave enclosures near the gate will be found the grave of Major Hodson of Hodson's Horse (see p 455)

The **Martinière School** is housed in **Constantia**, the country residence of Maj -Gen Claude Martin (1735-1800), who built it partially from designs of his own It is an enormous structure, consisting of a central block and two semicircular wings. The main building is five-storeyed and is bastioned, and loopholed The basement storey is raised to a good height above the ground, and has extensive wings, but the superstructure has been styled "a whimsical pile." The strange array of statues on the roof led the Marquess of Hastings to pronounce that the idea was taken from a castle of pastry. Martin's tomb, restored in 1865, is in the E crypt of the chapel, the plain sarcophagus was once guarded by a marble grenadier, with arms reversed, at each angle To the E of the building is a lake, in the centre of which rises a fluted masonry column 130 ft in height

General Martin served as a soldier under Lally in the regiment of Lorraine He, and some of his comrades, taken prisoner at Pondicherry (1761), formed a company of Chasseurs attached to the Company's Army, and rose to the rank of captain In 1776 he entered the service of the Nawabs of Oudh, but Warren Hastings allowed him to retain his rank and to enjoy promotion In 1783 he formed the acquaintance of De Boigne, and took part with him in cultivating indigo and lending money to the Nawab, by which he acquired a large fortune Dying at the Farhat Bakhsh before the building was finished, he directed it should be completed out of the funds left to endow a school.

This school is for the education of Anglo-Indian children [1] There are similar institutions endowed by Martin at Calcutta and Lyons, his birthplace A flag showing the school arms, a picture of the Residency, and the honour "Defence of Lucknow, 1857," is carried on ceremonial occasions The advance on the Martinière in November 1857 met with strong resistance It was held again in March 1858, and Sir William Peel was wounded by a musket-ball

The **Dilkusha**, or "Heart-expanding," was a villa built by Sa'adat 'Ali Khan in the midst of an extensive deer-park It stands S. of the Martinière, and is now

[1] "Kim," the hero of Mr Kipling's well known story, was sent to school at the Martiniere

a ruin. It was captured on the 12th of November 1857 by Sir Colin Campbell, and here twelve days later General Havelock expired In Sir Colin Campbell's second advance it was occupied on the 2nd March It was once used as a residence by the General commanding the Oudh Division, but the structure was pronounced to be unsafe The grounds have been laid out as a flower-garden There are some tombs of British officers in the adjoining ruins of the **Wilayati Bagh** (to the E on the river-bank), which was originally a zenana garden made by Ghazi-ud-din Haidar in the European style, whence its name

About 1½ m S E of the Charbagh (Junction railway station), on the Cawnpore Road, is the **Alambagh**, with the grave and memorial of General Havelock It was first taken by him on 23rd September 1857, was occupied by a detachment left behind with the baggage and wounded till the arrival of Sir Colin Campbell on 12th November, and was held by Sir James Outram and a force of 4500 after the evacuation of the Residency from 27th November 1857 till March 1858. It is a walled enclosure 500 yds sq and was built by Wajid 'Ali General Havelock's tomb is surmounted by an obelisk 30 ft high, with an inscription

Quarters N W. of the Residency and across the Gumti

Five hundred yards to the N.W. of the Residency is the **Iron Bridge**, across which the troops passed to and from the fight of Chinhat, and over which General Outram passed on 16th March 1858 It was designed by John Rennie, the engineer of Waterloo Bridge in London, and brought out from England in 1815 by Henry Jessop, but was not erected till 1840-1844 From it there is a view of the Farhat-Bakhsh-Chhattar-Manzil Palace

Across the bridge to the right is the **Badshahbagh**, from which the enemy kept up a severe fire on the Residency, and from which the shell which caused the death of Sir Henry Lawrence came It was taken by Sir James Outram on 8th March 1858 Of the three buildings of which it was composed, only the Red Baradari remains The gateways also are still standing It was given to the Raja of Kapurthala in 1858, and was purchased for the **Canning College** (1912) At Hassanganj, the Fyzabad road turns to the right and leads to the Kokrail Bridge and (3 m) Ismailganj, 1½ m. in front of **Chinhat** (6½ m) The main road to Sitapur proceeds N to the old Cantonment of **Mariaon** (2½ m)

1200 yds N W of the Residency is the **Great Imambara** of Asaf-ud-daula, which is built on the W slope of the **Machhi Bhawan**[1] enclosure. The fort was rebuilt after the Mutiny and fortified, but dismantled in 1877 It once extended 800 yds along the road and 500 yds to the S of it, while the N.W end reached almost to the river-bank above the old stone bridge, which crossed the Gumti opposite the centre of it The major portion of the site is occupied by **King George's Medical College** and **Hospital**, of which the foundation-stone was laid by King George V., as Prince of Wales, on 26th December 1905 The cost of the whole building, which was completed in 1912, was

[1] "Fish House," so named after the fish which Safdar Jang was permitted by imperial edict to use as his badge.

the *Sola Khamba*, from the sixteen pillars which support the roof, the brackets of the corner pillars are carved to resemble the head of an elephant. The pavilion contains five tombs, two of marble. Tradition affirms that they are the tombs of the two other wives of the Sheikh, who are buried here, but one of them bears the *kalamdan*

The **tomb of Ibrahim Chishti**, the father of Sheikh Abdur Rahim Khan, lies still farther eastward, now open to the Nadan Mahal Road. It is composed of *kankar* blocks, and was originally plastered and painted An inscription over the S door gives the date of the death of Ibrahim Chishti as 1543 A D

Cawnpore (45 m by rail) may be visited during a stay in Lucknow (for route, see p 438) If the traveller is going South, he will find much to interest him at **Jaunpur** (p 423), which can be reached (165 m) from Lucknow **Jn.** by the Howrah-Dehra Dun express From Jaunpur the journey can be continued to **Benares** Cantonment (Route 5) and **Mughalsarai** (p 54)

ROUTE 23.

(*a*) CALCUTTA (**Howrah**) by the East Indian Railway loop-line to **Lakhisarai** and **Mokameh** by Nalhati Junction (for **Azimganj**), **Tinpahar Junction** (for **Rajmahal**), **Sahibganj**, **Bhagalpur** and **Jamalpur** (for **Monghyr**)

(*b*) **Mokameh** by Bengal and North-Western Railway main line to **Tirhut** and **Cawnpore** *viâ* **Gorakhpur**

(*c*) CALCUTTA (Sealdah) by Bengal-Assam Railway to **Plassey**, **Murshidabad**, **Lalgola Ghat** (for **Malda**, **Gaur** and **Pandua**), and **Katihar Junction** (for B and N W Ry main line).

(*a*) **Calcutta** by East Indian Railway loop-line to **Lakhisarai and Mokameh**

Howrah (p. 106).

75 m **Khana** junction (see p. 66) Here the loop-line branches off N to

96 m Adjai River, bridge 1728 ft long (1907)

99 m **Bolpur** for Santiniketan (Visabharati) College, founded (1901) by Sir Rabindranath Tagore (d 1941)

145 m. **Nalhati** junction Branch constructed (1863) by the Indian Branch Line Coy on the 4-ft gauge, bought by the State (1872) and converted E to Azimganj City

27 m **Azimganj** Jn The Bandel-Barharwa (p. 66) line on the W. bank of the Bhagirathi passes through here. Opposite Azimganj City Station on the E. bank (no connection) is Jiaganj (D.B),

1 m from Jiaganj Stn. of the B A. Ry., which is 5 m. above Murshidabad There is a metalled road from Jiaganj to Murshidabad. Azimganj is an important centre of the Jains. The Bhagirathi is here 700 ft. broad, and rises in the rains 25 ft., when the current runs 7 m an hour

195 m. from Calcutta, **Tinpahar** junction station (R H)

A branch line runs N E to

7 m Rajmahal stn (D B K) in the Santal Parganas The town stands on the W., or right, bank of the Ganges. It affords opportunities of seeing some specimens of the remarkable tribes of Santals and Mal Paharias[1] The Santals supply labour in the coalfields

Up to 1592 A D it was known as Agmahal but when Raja Man Singh of Jaipur, Akbar's Rajput general, returned from the conquest of Orissa in 1592 A D, he made it the seat of his Government, and changed its name to Rajmahal In 1607 Islam Khan, Governor of Bengal, transferred the seat of Government to Dacca, but it was again brought to Rajmahal by Sultan Shuja in 1639 In 1707 Murshid Kuli Khan transferred the Government to Murshidabad, and Rajmahal fell into decay In 1863 the Ganges shifted its channel, and Rajmahal was left 3 m. distant from the main stream The river returned to Rajmahal in 1929

Just beyond the ry. station is the tomb of the son of Mir Jafir (p. 469), Miran, who put Siraj-ud-daula to death, and was killed by lightning in 1760.

N of the station is the sub-Divisional Officer's Court (formerly the Mughal Governor's house). A little farther on are remains of a building called the *Sangi Dalan* ("Hall of Stone"). It is 100 ft. long from N to S, and has three doors of black basalt in the centre. This is said to have been part of the palace of Sultan Shuja, son of Shah Jahan and Governor

The *Maina Tank* is ¼ m due W. of the *Cutcherry*. At its S. end is a massive brick building, with an Arabic inscription, and 100 yds to the S. is the Maina Mosque. There is a tomb of a Maina Bibi

The *Hadaf* is 4 m to the N.W The road at 1½ m passes a solid brick building on the right hand, called the Tanksal, or Mint, with walls 5½ ft thick The Hadaf ruins are about 200 yds off the road to the left The entrance to the quadrangle is by the E. gateway, which is much injured. The mosque proper has a façade 200 ft. long, with seven arches, each 22 ft high In the centre of the quadrangle is a reservoir, with steps down to the water. The buildings are surrounded by dense jungle, but the actual structures have been cleared

The journey to English Bazar, the headquarters of the Malda District, 24 m distant, formerly made by road from Rajmahal is made by ferry, otherwise detours must be made *viâ* Murshidabad (p. 468) or Katihar (p 472).

From Tinpahar station the loop-line continues N. to

214 m **Sakrigali** junction, waiting-rooms, railway steamer for Manihari Ghat and Katihar, across the Ganges, on the B A Ry

219 m. **Sahibganj**, a centre of trade (D.B.). The industries are

[1] See *The Story of an Indian Upland*, by F. B. Bradley Birt (Smith Elder, 1905) A regiment of Paharia "Hill Rangers" was raised in 1780 by Augustus Cleveland (p. 462)

the collection of *sabai* grass (for paper manufacture), flour mills and oil mills; there are stone quarries near. **Katihar** is the junction for the Bengal and N.W. Railway main line (530 m) to **Cawnpore.**

265 m **Bhagalpur** junction (D B K) (old name Sujanganj), headquarters of a District in the Province of Bihar, on the S bank of the Ganges. There is a monument here to Augustus Cleveland, who reclaimed the Santals from savagery and robbery

A ferry connects a branch line to (23 m) Thana Bihpur on B N W Ry Branch line also (31 m) to **Mandar Hill,** 700 ft high Vishnu is said to have cut off the head of Madhukaitab, a giant, and to have piled this hill over him For a mile or two round its base old buildings are to be seen; also some stone figures On the side is a spring, Akash-ganga (river of the sky), to which the only access is by a wooden ladder about 15 ft high on the left of the spring a colossal figure of Madhukaitab is traced on the rock On an Asoka pillar the name of Magardhwaja Yogi is inscribed

280 m. **Sultanganj**, famous for a **Temple** of Gaibinath, which is built on a rock in the middle of the Ganges, and is reached by a ferry.

298 m. **Jamalpur** junction (R) is a railway settlement for the E I. R locomotive engineering workshops, which were originally established here in 1862 They were damaged in the earthquake of 15th January 1934. A new Indian colony has been built at Rampur, W of the railway. An old locomotive, "Fairy Queen," is shown. Branch line to, 5½ m.,

Monghyr (D.B.K.), on a promontory in the river. The Civil Station is inside an old Mughal fort, to which Mir Kasim moved (1762) from Murshidabad in order to be farther from Calcutta The place is noted for the manufacture of arms and ebony work. There is a large cigarette factory Within the fort, towards its N W. corner, on the edge of the spur, are several picturesque temples

A ferry connects a branch line to Sahibpur Kamal, on B N W Railway; thence E to **Katihar,** and W to Barauni, for Chapra (p 464)

In the earthquake of January 1934 the town suffered severe loss of life and property, but recovery has been rapid

Three miles to the E, on the hill called Pirpahar, stands a magnificent house, said to have been built by Mir Kasim's Armenian General, Gurghin Khan A little to the S E of this are the sacred hot springs of Sitakund, the water was shipped for use on the voyage to England *c* 1786 About 2 m S of Monghyr is the Dakra Nala with remains of an ancient bridge blown up by Mir Kasim in his retreat before Major Adams (1763)

Cleverly designed silver fishes are manufactured at Kharagpur (D B), 20 m. S.W. of Monghyr. Motor service available. This place has beautiful scenery.

326 m **Lakhisarai** (Kiul junction) for the main line (p 65) The bridge, 1458 ft long, was built in 1870

347 m. from Calcutta by loop-line, **Mokameh** Jn. (D.B.K.) (p. 65). Branch to Mokameh Ghat.

(*b*) From **Mokameh** by the B and N.W Railway main line, to **Tirhut** and Cawnpore, *viâ* **Gorakhpur**

Mokameh Ghat is the starting-point for the Ganges ferry steamer to Semaria Ghat and the branches of the Bengal and North-Western Railway, connecting the whole country between Oudh and the Kosi River with the S bank of the Ganges From Semaria Ghat by train to

6 m **Barauni** junction The main line (B N W R) from Cawnpore runs E to **Katihar** (112 m) crossing the Kosi River (26 m from Katihar) by a bridge 3172 ft long (1902) There are branches to the river opposite Monghyr, Bhagalpur, and Sahibganj

The main line W runs to Hajipur (54 m), separated from Sonepur (57 m) by the Gandak river, boundary of Oudh, bridge 2176 ft long (1887), and to Chapra (90 m) **Sonepur** has a Fair in Oct -Nov There are usually 400 - 500 elephants for sale Formerly there was a large annual gathering here of planters from Tirhut It celebrates a fight between Gajendra (lord of elephants) and a huge crocodile The platform here is 2415 ft. long For stations beyond Chapra on this line see p 464

A branch line runs from Sonepur to Palezaghat (8 m), from which a steamer crosses to Dighaghat for Patna Jn (p 61).

The main line to Tirhut proceeds from Semaria Ghat to **Samastipur** (D.B K , 38 m.), from which a loop runs *viâ* **Darbhanga** jn (24 m N), crossing the Bagmati river at Dhang (m 80) by a bridge 1620 ft. long (1912) to Narkatiaganj (119 m farther N W) and Bagaha (26 m. W.) on the Gandak River, with a ferry. The bridge, 2393 ft long (1912), was abandoned in 1924. Thence to Gorakpur (63 m. S.W.) in the United Provinces. Another branch from Samastipur to Rusera Ghat (18 m. S.E) and thence to Khagaria (37 m) on the main line, and (59 m.) Mansi.

Darbhanga (alt 157 ft.) is the residence of the Maharajadhiraja, of Brahman descent and a large landlord in Bengal and Bihar. The title of Raja was granted to the family in 1710 by Ali Vardi Khan, of Maharaja in 1839, and of Maharajadhiraja in 1920. Sir Rameshwar Sing, the late Maharajadhiraja, was a member of the Executive Council of the Province of Bihar and Orissa. The Anandbagh palace is a very fine building. The Government Offices are situated at Laheria-Sarai (good D B K), which is 3 m by rail from Darbhanga jn Motor-cars and supplies are obtainable at Laheria Sarai Samastipur (D B) and Madhubani (D B) are the headquarters' stations of the two subdivisions of the District At Rajnagar there is a palace built by the late Maharajadhiraja, but damaged by the earthquake of 1934, with an epicentre to the N E

From Darbhanga jn. a branch line runs to Sakri (12 m N.E.), and Bhaptiahi (42 m) for Partabganj Ghat (12 m E) on the Kosi river There is a branch line from Sakri to Madhubani (10 m N), Rajnagar (16 m) and Jainagar (29 m.) on the Nepal frontier.

From Samastipur the railway to Tirhut runs to **Muzaffarpur** jn (D B K , 32 m N W.), hdqrs. of the Tirhut Division, whence there is a cross line to Hajipur on the main line (Cawnpore to Katihar), which again meets the Tirhut line at Bachhwara (between Semaria Ghat and Samastipur Ghat). From Muzaffarpur the Tirhut line con-

tinues 50 m. to Motihari (D B.), 63 m to Sagauli, 77 m to **Bettiah** (D.B K) A Capuchin Mission used to work in Nepal (1707-67)

Muzaffarpur District was badly damaged by earthquake in January 1935, the casualties being 2539

6 m. by road from Pusa Road station on the line between Samastipur and Muzaffarpur is **Pusa**, on the Gandak R. An Imperial Agricultural Research Institute (now removed to Delhi), was built on the initiative of Lord Curzon, Mr Phipps, an American gentleman, made a substantial donation towards its cost. The buildings were seriously damaged in 1934. The Botanical Section remains, and the rest is merged in the Agricultural Department of the Government of Bihar The District abounds in old temples and places of historical interest, being identified with the ancient Hindu Kingdom of Mithila mentioned in *Hindu mythological* works

From Sagauli a branch of 18 m runs to Raxaul, the starting-point for **Katmandu** (alt 4350 ft.), capital of Nepal, which once extended to the Sutlej river A Nepal Government Railway runs from Raxaul to Amlekganj (24 m), but Nepal can only be entered by special permission

16 m N of Bettiah (nearest Ry Station Chanpatia, on a branch line from Sagauli to Narkatiaganj, which proceeds thence to Bhikna Thori), at **Lauriya Nandangarh** is a Buddhist stone lat—crowned by a lion—of sandstone, 33 ft high, with a capital nearly 7 ft. in length. One Reuben Burrow carved his name on it in 1792. Funeral mounds near this column are said to be the only indisputably Vedic monuments yet identified in India

There is another column at Araraj, 22 m S W. of Motihari Stn (on the branch line from Muzaffarpur to Bettiah), where motors are available Two other pillars (one of 45 ft) are lying on the ground, at Rampurwa, 1 m S of Gaunaha Ry Stn on the Narkatiaganj-Bhikna Thori line, and at Basarh (Vaisali). All four were set up on the road from Pataliputra (Patna) to Nepal.

Main Line.

From Sonepur station (p 463) the main line goes W to Chapra (D.B K, old name Saran), 202 m from Katihar, at the confluence of the Ganges and the Gogra, once an important river-mart, with Dutch and English factories headquarters of the Saran district

A branch runs N to Captainganj junction Another branch crosses the Gogra River by the Inchcape bridge, 3819 ft long (1912), and runs *viâ* Ghazipur and Benares Cantonment (Route 5) to Jhusi (near Allahabad)

79 m. from Chapra on this branch line is Ghazipur (D.B.K) A mausoleum commemorates the death here on 5th October 1805 of Marquess Cornwallis, Governor-General. Ghazipur and Patna (p 61) were the two opium agencies The Patna agency was closed in 1911 and the cultivation of opium is carried on by a system of annual engagements and advances From Aunrihar jn. (106 m. from Chapra), also on this line, a branch runs 37 m. N W. to Jaunpur and another from Ballia *viâ* Phephna to **Azamgarh** (70 m) and Shahganj (105 m.), on the O. and R. section of the E.I. Railway. Ballia is in Dadri, said to have been the residence of a Rishi.

From Chapra the main line runs N W to (71 m.) Bhatni junction for a branch to Benares Cant., crossing the Gogra River by a bridge 3912 ft long (1903). Gogra means Laughter

The main line continues to **Gorakhpur** (112 m from Chapra), named after a Hindu saint and damaged by earthquake in 1934 It is the centre for the recruitment of Gurkha soldiers for the Indian army, and also the hdqrs of the B and N W Ry (D B K, permission of Chairman, Dt Bd reqd Inspn Bung, permission of Dt. Engr reqd). Gorakhpur to Fyzabad, by road, 79 m, Fyzabad to Gonda, 29 m

A loop-line runs North to (40 m.) **Uska Bazar**, and to Gonda (p 421) A second loop runs S., 103 m., to Savan on the main line (38 m from Chapra) Another branch runs N E to Narkatiaganj, 89 m., in Champaran District

The Tarai, N of **Uska Bazar** (Basti Dt), was the undoubted seat of the birth of Buddha, and of many of the scenes connected with his life and death. What has been identified beyond all doubt are (1) a stupa raised over part of the relics of Buddha at **Pipráwá**, 6 m N of Birdpur (nearest ry stn is Nowgarh, next to Uska Bazar stn. on the Gorakhpur-Gonda loop), and (2) the Lumbini Garden, now called the **Rummin Dei** (in Nepal), where Buddha was born, 9 m E. of Pipráwá. Nautanwan is the nearest railway station, the Collector, Gorakhpur, can give information.

In the stupa here was found by Mr Peppé, owner of the estate, in January 1898, a relic-casket inscribed, "This relic shrine of the Divine Buddha is that of the Sákyas," who received one-eighth of the relics and erected a stupa over them near Kapilavastu At the garden was discovered a lat of King Asoka, split down the middle, with an inscription that "here Buddha Sakyamuni was born" This column had been once surmounted by a horse, and Hiuen Tsang (629-645 A D) recorded that he saw at the birthplace a pillar which had been split by lightning, and which bore a horse The bell-shaped capital of it has also been discovered, and in an adjoining temple a relief of the birth scene of Buddha, in which his mother, Maya-devi, stands erect holding the branch of a sal-tree, and the child stands on the ground at her right, a usual motive Kapilavastu lay 10 m to 15 m W of this garden, and the site is possibly marked by extensive ruins at Tauliya Kot (in Nepal), 9 m N W of Pipráwá

Between Bhatni and Gorakhpur is, 81 m from Chapra, **Tahsil Deoria station** 21 m. N of this station, 12 m. S of **Padrauna** station on the Gorakhpur-Savan loop (43 m from Gorakhpur) and 34 m E of Gorakhpur, is **Kasia** (connected with each of these places by metalled roads), containing an Inspection Bungalow (permission to occupy can be obtained from the Chairman, District Board, Gorakhpur)

1 m W of Kasia are ruins believed to be the site of **Kusinagara**, scene of the death and cremation of Buddha These comprise six groups; the first consists of an isolated brick stupa some 50 ft in height on the W edge of the Ramabhar Tal, bearing the name of Devisthan or Ramabhar Bhawani the second is a small mound of ruins to the S W. of this stupa and a short distance to the N.E. of the village of Anrudhwa. The third is the Matha Kunwar-

ka-kot, about a mile W of the Ramabhar stupa, comprising a temple with a colossal recumbent image of the dying Buddha, a large stupa, several monasteries and other buildings The fourth is a colossal statue of the seated Buddha, called Matha Kunwar, about 400 yards S.W. from the kot, while the fifth consists of the remains of an enclosing wall and the last of a number of small earthen mounds and barrows, locally called Bhimawat, to the N and E. of the kot

Excavations made in 1896, and further work done in 1904-7, showed that the stupa and temple were the nucleus of a group of Buddhist buildings belonging to widely different periods, the later on the ruins of earlier monuments Coins and inscribed objects prove that buildings may be dated to the Kushana and early Gupta periods In the 5th or 6th century a portion of the buildings was destroyed in a fire, possibly due to an invasion of the Huns Numerous clay seals inscribed "Convent of the Great Decease" have been found The place is visited by Buddhist pilgrims mostly from Burma

9 m from Gorakhpur the main line of the Bengal and N W Railway crosses the Rapti River by a bridge 1445 ft. long (1886), and proceeds to Gonda (207 m from Chapra). At m 239 it crosses the Gogra River by the Elgin bridge, 3695 ft long (1898), and runs to, 262 m., Barabanki, 283 m , **Lucknow** (Aishbagh junction) and, 328 m., **Cawnpore.** The through journey (530 m) between Katihar Junction (p 472) and Lucknow, both ways, can be made by express train.

(c) Calcutta by Bengal-Assam Railway to Plassey and Murshidabad, and on to Lalgola Ghat (for Malda, Gaur, and Pandua), and Katihar Junction.

Sealdah station (p. 107).

21 m. **Naihati** junction for Bandel junction on the East Indian Rly. (Route 2) across the Jubilee Bridge At Mulajore is a Power Station (1940) of the Calcutta Electric Supply Corporation

46 m **Ranaghat,** junction for the main line to Siliguri and Darjeeling (Route 24) Branch to Santipur (12 m), whence N G railway and Nabadwip Ghat to Krishnagar City

Santipur was once famous for its fine muslins.

The Murshidabad branch was opened in 1907, and runs to

62 m **Krishnagar.** Hdqrs of the Nadia Dt , and residence of the Maharaja Bahadur of Nadia

Nabadwip (Nadia), by the N.G Ry from Krishnagar to Nabadwip Ghat, 8 m , or by the Bandel-Barharwa loop-line of the E I. Ry from Howrah, is a celebrated seat of Sanskrit learning, and is also a great place of pilgrimage, being known as the "Benares of Bengal" It was the birthplace of Chaitanya (1486-1527 A D), the Hindu religious reformer

93 m. from Calcutta, **Plassey** station There is a good bungalow 3 m. from the railway station, close to the monuments on the battlefield , but travellers must make their own arrangements for meals and servants There are no conveyances available

The bungalow is in the charge of the Executive Engineer, Burdwan Division, Chinsura, Bengal , travellers should ascertain from

him whether the bungalow will be vacant.

Plassey (Mira or Palasi, from the Palás-tree, *Butea frondosa*), is famous for Clive's great victory in 1757. The position of the British forces is marked by a mound near the river-bank and the old monument, and has now been more fully indicated on the ground at the instance of Lord Curzon, who erected a second memorial.

The British force advanced from Chandernagore (p. 128) on 13th June, first to Katwa, and then across the Bhagirathi, between which and the Jalinghi Spill of the Ganges Plassey was situated, and advanced against Suraj-ud-daula's army at that place on the night of 22nd June. The battle opened the next day, 23rd, at 8 A.M., the French in the service of the Nawab facing the left of the British line, which touched the river, and the huge Indian forces of the Nawab forming a semicircle on the right front and right flank. About midday a heavy downpour of rain occurred, but the British guns, the powder having been protected, overpowered the advance made by the enemy a little later. The Indian forces then fell back to the entrenched camp, the Nawab was counselled by traitors to flee, and Mir Jafar separated himself.

Clive confirmed an order by Major Kilpatrick to advance, drove the French from their position, and afterwards took the entrenched camp, the enemy then offering but little resistance. The British casualties amounted to 28 killed and 50 wounded out of 3000—650 only of these being English—and the Nawab's force lost about 200. Captain Eyre Coote, who had been a strong supporter of the counsel to fight, which Clive ultimately adopted, distinguished himself greatly.[1]

Landmarks mentioned in accounts have mostly disappeared, such as the Mango Tope, in which the British were entrenched (last tree before 1870), the brick-kilns which formed their advanced posts, and the Nawab's hunting-lodge. The regiments engaged were permitted to emblazon "Plassey" on their colours, but the 1st Battalion of the Dorset Regiment (the old 39th Foot) alone remains since the Irish Free State was formed.

116 m. **Berhampore** Court., 7 m. below Murshidabad (D.B.). The Krishnanath College here is affiliated to the Calcutta University. As the factory house at Kasimbazar, where Warren Hastings resided, had been destroyed by Suraj-ud-daula, Berhampore was chosen as a site for a Cantonment in 1765, and became Headquarters Third Brigade.

It was the scene of the first act of mutiny in 1857, which occurred on the 25th of February, when the 19th Bengal Infantry refused to receive their ammunition. The regiment was marched down to Barrackpore and disbanded there. In the cemetery here are buried George Thomas, the Irish sailor who became Raja of Hansi (p. 345), and the infant son of Mrs Sherwood, whose *Little Henry and his Bearer* was at one time a nursery classic.

118 m. **Kasimbazar.** This was the British trading-station previous to 1756. The English were settled here as far back as 1658, and Job Charnock, the founder of Calcutta (p. 103), was "Chief"

[1] Clive took his title of Baron of Plassey in the Irish Peerage from the estate of Ballykilty in County Clare, which he purchased on his return from India, and which he renamed Plassey, after "the place where we gained our great victory in India, to which I owe all my good fortune" (Letter of 13th February 1761, to the Duke of Newcastle).

in 1681. Of the factory, which was once a fort with solid bastions mounting four guns and a saluting battery of twenty-four guns on the river-side, nothing is visible except a mound containing a portion of the fortifications In the old Residency cemetery, opposite the site of the factory, are buried the first wife of Warren Hastings and her daughter She was the widow of Captain John Buchanan, a victim of the Black Hole, and died in 1759, while Hastings was Resident (1758-61) There is an old *Dutch Cemetery* Feringipur, the French factory, has been washed away At Kasimbazar is the residence of Maharaja Srish Chandra Nandi, a descendant of Hastings' famous dewan, Kantu Babu.

122 m **Murshidabad**, residence of the Nawab Nazims of Bengal, was called after the great Nawab Murshid Kuli Khan,[1] the original name being Maksudabad, whence the Muxadabad of old records. It was a prosperous place owing to its being upon the line of trade from the interior of India to the European settlements on the Hooghly, down the Bhagirathi River

Murshidabad was famous for carved ivory, embroideries, etc But now these trades are confined to a few families of carvers at Jiaganj and Khagra An introduction to the Nawab Bahadur of Murshidabad, through the Magistrate and Collector, who resides at Berhampore, will greatly facilitate the sight-seeing of the place.

1 The well-known Subadars and Nawab Nazims of Bengal were Murshid Kuli Khan (known also as Jafir Khan, a converted Brahman), died 1725, Shuja Khan, died 1728, Alivardi Khan, died 1756, Suraj-ud daula, Mir Jafir and Mir Kasim The famous Jain family of Murshidabad which bore the title of Jagat Seth, or World Trader, and played a prominent part in the affairs of India in the 18th century, resided at Mahimapur, 2 m. N of Murshidabad (See *History of Murshidabad*, by Major J. H. T. Walsh.)

The *Bera* (*Raft*) *Festival* is still celebrated here, in honour of Khwaja Khizr (the prophet Elias) on the night of the last Thursday of the Bengali month of Bhadra

The *Palace of the Nawab*, which, with the surrounding buildings, enclosed by a wall, goes by the name of the *Nizamat Kila*, is situated on the river-bank about the centre of the town, and is in the Italian style, somewhat resembling Government House at Calcutta It was built in 1837, the architect being General Duncan Macleod (1780-1856) of the Bengal Engineers It contains an imposing circular Darbar-room, a Banqueting-room 290 ft. long, with a picture of the Burial of Sir John Moore, by Marshall, at the W end, and many other handsome apartments The Armoury is well worthy of a visit In the Library are some very rare MSS.

In the same enclosure is the *Imambara*, built in 1847

Just outside the city is the *Katra*, containing the tomb of Murshid Kuli Khan It was constructed on the model of the Great Mosque at Mecca, with two minarets 70 ft. high, but is now in ruins

Near this, and 60 yds. from the road, is the *Great Gun*, the sister gun to one at Dacca It is 17½ ft long, with a girth of 5 ft at the breech and a calibre of 6 in The gun was left on its gun-carriage where a *pipal* tree grew, from a seedling, beneath it and supports the gun entirely The inscription is in Persian, with the date 1637

2 m S of the city is the *Moti Jhil*, or "Pearl Lake." The palace, which was on the bank of the lake, was seized by Suraj-ud-daula in 1756, and it was from its doors that he set out in the following year to Plassey Here Clive held the first English

puniya, or collection of revenue, in 1765, sitting side by side with the Nawab Nazim, Najm-ud-daula. It was the home of Warren Hastings in 1761 and later on of Sir John Shore, who admired its "cooing doves, whistling blackbirds and purling streams." The pleasure garden is still known as the Company Bagh, but the only buildings which survive are the mosque of Shahamat Jang, the nephew and son-in-law of Alivardi Khan, and the ruins of the Baradari built by Mir Jafir after Plassey. In the *Mubarak Manzil*, the old Court House of the E I Company, a little to the E. of the Moti Jhil, there was kept the black stone throne of the Nawab Nazim upon which Clive installed Mir Jafir after the battle of Plassey, and upon which he himself sat in 1765, when he proclaimed that the Company had taken over the *dewani* (rent collections) of Bengal, Bihar and Orissa), under the farman of the Emperor of Delhi, Shah Alam, granted on 12th August 1765. The throne has been removed to the Victoria Memorial Hall at Calcutta (p. 115) and its place taken by a plain stone slab. The lake contains a good many crocodiles.

The *Khushbagh*, or "Garden of Happiness," the old cemetery of the Nawabs, is opposite to the Moti Jhil on the right bank of the river. It consists of three walled enclosures. The entrance to the outer one, planted with flowers and shady trees, is from the E., close to where some ruined ghats stretch down to the deserted bed of the Bhagirathi. In the central enclosure are the tombs of the "good Nawab," Ali Vardi Khan, and his nephew and son-in-law Suraj-ud-daula. They are almost level with the ground, and are covered with embroideries. The third enclosure contains a tank and Musafir Khana (Travellers' House, not available). The Hira (diamond) Jhil, where the Mansurganj Palace stood, is near the *Roshanbagh*, also on the right bank of the river, opposite to the present palace.

The *Nizamat College*, or Nawab's Madrasa, which was formerly kept exclusively for the relatives of the Nawab (who live free of charge in a special boarding-house), has now been amalgamated with the Nawab's High School under the name of the "Nawab Bahadur's Institution."

The *Cemetery of Jafra Ganj*, about 1 m. to the N. of the Palace, contains the graves of those Nawabs Nazim who were appointed by the English. Opposite the gate is a handsome mosque.

The *Jafraganj Deorhi* was the residence of Mir Jafir before he became Nawab. In the women's quarters was held the last secret conference with Watts, the chief of the English factory, before the battle of Plassey. Suraj-ud-daula was killed here by Mir Jafir's son Miran.

The Murshidabad District is noted for its *silk* industry. The villagers rear the silkworm at home, and sell the cocoons to the spinners, who export the skeins. Silk cloth and handkerchiefs are woven here on hand-looms.

From Murshidabad the railway runs on to

145 m. **Lalgola Ghat**, on the Ganges (occasional steamer service to Rajmahal, p. 461). Railway steamer connection with Godagari Ghat, on the N. side of the river, for a line (opened 1909) to (14 m.) Amnura, in for a B G. line to Ishurdi *viâ* Rajshahi, also to Nawabganj and (49 m.) **Malda**.

English Bazar is on the right bank of the Mahananda 4 m. below Old Malda. Arrangements should

be made by writing to the Collector at Malda. From English Bazar to the N. of Gaur is about 4 m.; and to the Adina Mosque at Pandua about 13 m. The visit to either place will occupy a whole day. A boat may be engaged through the Stn -master Mochia

Old Malda lies at the confluence of the Kalindri with the Mahananda It probably rose to prosperity as the port of the Muslim capital of Pandua During the 18th century it was the seat of thriving cotton and silk manufactures, and the French and Dutch had factories here. The English factory was originally established in 1656 at Old Malda and was transferred in 1771 to English Bazar (Angrezabad) It was fortified with bastions, and the modern court-house and all the public buildings are within its walls A column "erected by Thomas Henchman, 1771," stands in the compound of the court-house

Gaur and Pandua, successive capitals of Bengal, are in ruins, having been built of brick. They show the Bengali roof The sites have been brought under the plough, and the dense jungles which sheltered tigers and leopards no longer exist

Gaur was the metropolis of Bengal under its Hindu Kings. Its most ancient name was Lakhnauti, a corruption of Lakshmanawati But the name of Gaur also is of great antiquity, and is found in the *Gauriya Brahmana* Its known history begins with its conquest, about 1200 A.D.,[1] by Bakhtiyar Khilji, whose successors ruled for more than three centuries A son of the Emperor Altamsh was Governor here, and the eldest son of Balban, Nasir-ud-din Bugra, became King of Bengal and refused the throne of Delhi He was succeeded by two sons and a grandson, and then, about 1338, Fakhr-ud-din rebelled and founded a kingdom of independent Afghan Kings, made Pandua his capital, and robbed Gaur of building material. This accounts for the number of sculptured Hindu stones amongst the ruins of Pandua Pandua was in its turn deserted about 1500.

Gaur, again the capital, was called Jannatabad ("Terrestrial Paradise"), a name which occurs in the *Ain-i-Akbari*. It was sacked by Sher Shah in 1537, and was absorbed into Akbar's empire in 1576 A.D. The city was entirely ruined by an outbreak of the plague in 1575 Contemporary narratives describe the place, in its prime, as extremely populous, containing the residence of the court and numerous seats of learning, and enjoying an immense trade

The dimensions of the city proper, within the great continuous embankment, are 7½ m from N to S, and 1 m to 2 m broad The W side was washed by the Ganges, which flowed where the channel of the Little Bhagirathi now is The E. side was protected by the Mahananda and by swamps On the S. the Mahananda joined the Ganges, and left little space for an enemy to encamp. On the N. a fortification 6 m long extends in an irregular curve from the old channel of the Bhagirathi at Sonatala to near the Mahananda at Bholahat This rampart, in ruins, is 100 ft wide at base.

In front lay the **Sagar Dighi**, 1600 yds. long by 800 yds. broad, dating from 1126 A D On the bank is the tomb of Makhdum Shaikh Akhi Siraj-ud-din and a small mosque, and S of these is a ghat called S'adullapur, leading down to the sacred river S. of this rampart was the N. suburb, between which and the city was another strong rampart and ditch. Towards the Mahananda the city

[1] Blochmann says 1198 A.D , Thomas, 1202 ; Major Raverty, 1194

rampart was double, and in most parts there have been two immense ditches, and in places three.

1 m. inside the city to the S., on the Bhagirathi, was the *Citadel*, 1 m. long from N. to S., and from 600 yds. to 800 yds. broad. The brick wall was very strong, with many flanking angles, and round bastions at the corner.

On the N. is the Dakhil Gate, built of small red bricks, and adorned with embossed bricks, which can still be seen on the towers at the four corners. The arch of the gateway is about 30 ft. high, and forms a corridor 112 ft. long.

In the S.E. corner was the palace, surrounded by a brick wall 66 ft. high and 8 ft. thick, with an ornamented cornice—hence called the *Bāis Gazi*, "Twenty-two Yards Wall."

At the S.E. corner of the citadel are two mosques, the smaller, *Kadam Rasul*,[1] built by Nasrat Shah (1518-32) in 937 A.H. (1530 A.D.), is kept in repair by the Indian Government. In connection with this mosque is preserved a stone, bearing what is reputed to be a footprint of the Prophet Muhammad. This is now in the custody of one Fayyaz Husain of Mahdipur, who produces it for the inspection of visitors. Near the Kadam Rasul are the domed tomb of Fateh Khan and S.E. gateway of the citdael.

Half a mile N. outside the E. wall is a five-storeyed tower, known as *Pir Asa Minar*, which had a chamber with four windows at the top, to which access was gained by a winding stair. The correct name of this tower is Firoz Shah Minar, Pir Asa being a local corruption. It was probably erected by Husain Shah (1493-1519) in commemoration of his victories in Assam. Sir W. W. Hunter says: "For two-thirds of the height it is a polygon of twelve sides, above that circular until it attains the height of 84 ft. The door is at some distance from the present level of the ground: and altogether it looks more like an Irish round tower than a *minar*." There is, or was, an inscription on this monument which ascribed its erection to Firoz Shah (1490 A.D.).

Half a mile N.W. again of this, and above the N.E. corner of the citadel, is the *Golden Mosque*, or *Baradwari*. It measures 168 ft. from N. to S., 76 ft. from E. to W., and is 20 ft. high. The entrance is by an arched gateway of stone 26 ft. in height and 6 ft. in breadth. The mosque originally consisted of four separate colonnades, arched and roofed over, and covered by handsome domes, in all 44 in number. Only one remains. Six minarets or columns of brown stone faced with black marble adorn the building, bands of hornblende about 12 in. in breadth embrace the column from the base to the capital, and are adorned with a profusion of flower work carved in marble. There was a raised platform at the N.W. corner of the mosque, probably for the use of ladies of the Court. Traces of this still remain. The whole appearance of this building is strikingly grand, exhibiting the taste and munificence of the Prince who erected it—Nasrat Shah, 1526 A.D.

Half a mile E. of the Kadam Rasul, on the side of the main road, is the *Tantipara Mosque*, remarkable for the embossed brickwork on the front. It was probably built in 1475 A.D.

Half a mile S. again is the *Lattan Mosque*, also called the Painted Mosque, from the bricks being enamelled in green, yellow,

[1] The only detailed account of the ruins at Gaur and Pandua is contained in Ravenshaw's *Gaur*.

blue, and white, and arranged in bands.

Half a mile above it is the Piasbari Tank, with a small R H A tradition states that the water of this tank was formerly very impure and injurious to health, and that condemned prisoners were allowed only this water to drink Piasbari means the "House of Thirst"

In the S wall of the city is a fine central gate, called the *Kotwali Darwaza*, and S from it stretched an immense suburb called Firozpur In it, 2 m from the S wall, is the *Lesser Golden Mosque*, the "gem of Gaur." It dates from about 1600 The carved stone panels in the front wall display very fine workmanship

Pandua is 7 m N E from Old Malda and begins at 11 m. from English Bazar It was called by the Muslims *Firozabad* The first independent King of Bengal, Fakhr-ud-din, made it his capital (p. 470) A road paved with brick, from 12 ft to 15 ft wide, passes through Pandua, and almost all the monuments are on the borders of it. Near the middle is a bridge the abutments of which have evidently been brought from the Hindu temples at Gaur, as figures of men and animals are sculptured on them

On approaching the ruins from the S, the first objects that attract attention are the 17th-century shrines of *Makhdum Shah Jalal* and *Kutb 'Alam Shah*, called the Chhe Hazari and Bais Hazari, or 6000 and 22,000, from the area allotted for their endowment. To the N. stands the small *Golden Mosque*, with granite walls and ten brick domes. An Arabic inscription says that it was built by Makhdum Shaikh, son of Muhammad Al-Khalidi, in 1585 A.D. N. of this is a high building, called *Ehlakhi*, as having cost a lakh It is 80 ft. square, covered by one dome, and contains the remains of Ghias-ud-din, his wife, and his daughter-in-law

2 m beyond it is the tomb of Sikandar, father of Ghias-ud-din It forms part of the great mosque, called the **Adina Masjid**, built about 1360 by Sikandar Shah, and shows traces of having been constructed out of Hindu and even Buddhistic remains, a "Buddhist railing," round the W front The Kibla (central hall) and Mimbar (pulpit) are gems of stone carving It extends 500 ft. from N to S, and 300 ft. from E to W This space is subdivided by transverse brick walls and stone pillars into 127 squares, each covered by a dome On the outside are many small windows, highly decorated with carved tiles disposed in arches The mosque proper is composed of a central apartment and two wings. The first is 62 ft. high in the centre from the floor to the middle of the dome To the N of it is a ruined gallery known as the Takht Badshahi

The only other ruin of note in Pandua is the Satâisgarh, said to have been the King's Palace It is situated opposite the Adina Mosque, in the midst of dense jungle. The remains of numerous cells, believed to be baths, may still be noticed.

The line from Godagari Ghat continues to (107 m) **Katihar Junction**; (123 m.) Purnea, with branches to the W., (166 m) Forbesganj; and (174 m) Jogbani on the Nepal frontier

Purnea (alt 121 ft) produces more than two-thirds of the jute crop in Bihar It was invaded by Gurkhas in 1809, and badly damaged in the 1934 earthquake The first flight over Mount Everest (29,002 ft) was made from Purnea

on 3rd April 1933, the planes climbed 35,000 ft. in 90 minutes, and were in the air for 3½ hours. It is named after Sir George Everest (1790-1866), who completed the Trigonometrical Survey of the Himalayas in 1841

From Katihar Jn the B A Rly. line crosses the Mahananda river near **Barsoe** by a bridge 1593 ft. long (1889) E to Dinajpur (69 m.) and **Parbatipur** (88 m.), where it connects with the B G. line to Darjeeling (Route 24)

ROUTE 24.

CALCUTTA (**Sealdah**) by the Bengal-Assam Railway to

(1) **Kurseong** and DARJEELING, Routes into **Sikhim** and **Tibet**

(2) **Khulna** and Barisal (Circular Tour)

(3) Goalundo for **Narayanganj**, DACCA and **Eastern Bengal**

(4) Goalundo and Chandpur, thence by Bengal-Assam Railway to **Chittagong**, **Sylhet** and **Cachar** (Surma Valley).

(5) **Gauhati**, SHILLONG, and **Assam Valley** (Circular Tour by river or rail)

The Darjeeling mail, the Dacca mail (*viâ* Narayanganj), the Chittagong mail (*viâ* Chandpur), and the Assam mail all start from **Sealdah** (p. 107), the Calcutta terminal station of the Bengal-Assam Railway, formed by the amalgamation in 1884 of the E.B. Guaranteed Railway and the Calcutta and S E Railway with the Northern Bengal State Railway (metre gauge) The Bengal Central Railway to Khulna was added by purchase in 1905 The Eastern Bengal Railway was opened to Kushtia in 1864, and to Goalundo in 1898 A steamer ferry made connection with the Bengal Northern metre-gauge system until the Ganges bridge was opened in 1915

A combined visit to Eastern Bengal, the Sylhet and Cachar Valleys and Assam is made to Goalundo, and thence by steamer to Narayanganj or Chandpur. A visit to Assam only, or a visit to Darjeeling and Assam, can be comfortably accomplished by the railway route *viâ* Parbatipur Jn. (or Santahar) and Gauhati.

(1) **From Calcutta by Bengal-Assam Railway to Darjeeling by Ishurdi, Siliguri, and Kurseong.**

5 m Dumdum jn for Khulna, and E I Ry

46 m. **Ranaghat** junction (D B) Branch E. for Jessore and Khulna and N W to Murshidabad See Route 23, p 466

84 m Chuadanga, indigo-growing centre until 1880

103 m **Poradaha** junction station. Branch line E to (52 m) Goalundo Ghat, on the Ganges (p. 482) for Dacca and Chittagong with branches S from Kalubphali

125 m **Ishurdi** junction, after crossing the Ganges by the Hardinge Bridge (no road), named after the Viceroy, Lord Hardinge of Penshurst, who opened it (1915) It has fifteen spans of 359 ft, and large training works, maintained with difficulty It cost £2,100,000 Branch, 51 m, N E to Sirajganj Ghat (p 485), an important centre of the jute trade Motor bus (S) to Pabna 18 m

132 m **Gopalpur**, branch to Rajshahi (29 m) and Amnura jn (53 m) for Malda (p 469). Rajshahi has a museum (1919).

173 m **Santahar** junction Branch line (M G) to Bogra and Teesta junction (p 487).

At Paharpur, 2 m from Jamalganj station (m. 208), is a temple with terracotta plaques

233 m **Parbatipur** junction (R), whence metre-gauge lines run E. to Amingaon, on the Assam mail route (p. 487), and W to (88 m) Katihar, junction with the B. and N.W. Ry (p 472)

295 m. **Jalpaiguri** (R., D.B.K.; alt. 289 ft.)

The Bengal Duars were ceded by Bhutan 1863. The Railway (metre-gauge), opened 1893, and now merged in the B.A Ry, runs through the tea-garden area, commencing from Lalmanir Hat jn. in the Rangpur Dt (p 487) and terminating at Madarihat. Branches run from Lataguri junction to Ramshai, from Mal station to Bagrakote, and from Chalsa station to Matelli in the N W corner of the District There is a ferry over the Tista river at Barnes Ghat near Jalpaiguri

There are some 140 tea-gardens within the District There are reserved forests in which rhino and tigers are to be found Elephants are especially plentiful and considerable numbers are captured by Kheddah operations or contract

318 m. **Siliguri** station (R, D B) N G ry on the Teesta Valley extension (p 478) to Gielkhola Stn, 30 m, whence 11 m by road E *viâ* Teesta Bridge (1940, 550 ft long) to **Kalimpong** (3933 ft), where are the St Andrew's Homes, established 1900 by Dr J A Graham (d 1942) for destitute children of European descent Queen Elizabeth Kindergarten was opened 1938 Heather Day is celebrated on 26th November There is a depot at 4 Middleton Row, Calcutta Cars, by arrangement with the proprietor of the Himalayan Hotel at Kalimpong, from Gielkhola stn

A cart-road, suitable for motors, runs from the Teesta Bridge to (25 m) **Gangtok**, the hdqrs of the Political Agent in Sikhim and Penlong-la (see p 481)

Another road from the Coronation Teesta Bridge runs to Bagrakot in the Duars

Another N G ry runs 70 m. to Kishanganj on the Parbatipur-Katihar Line. From Thakarganj

(38 m. by road) are ruins of a King Birat, mentioned in the Mahabharata.

Siliguri is the terminus of the broad-gauge line (converted from M.G. 1916-26). Passengers for Darjeeling transfer to the *Darjeeling Himalayan Railway* (1879-1881) on a gauge of 2 ft. The distance is 51 m., and the time occupied 5¼ hrs. The maximum gradient is 1 in 20. A rail motor runs daily on previous notice. Motor-cars (quicker and cheaper) for the journey by road are available. A military road (1839) was improved in 1861.

Travellers are strongly advised to have extra warm clothing at hand, as the change of temperature is very great. Spectacles or veils should be used against the dust and blacks from the engine, especially on the front seats of the open carriages, from which the best views are obtained, but Diesel-driven engines have been used since 1941. Only hand luggage can be taken into the carriages.

Siliguri was the base of the military expedition of 1904 into Tibet, Lhasa being 359 m. distant by the most direct route.

After crossing the Mahanadi River, at **Sukna** station, 7 m. from Siliguri, the cars begin to ascend. The turns are very sharp, and at each a fresh landscape is opened out. The sides of the mountain are clothed with lofty trees and masses of jungle, with tree-ferns at higher altitudes. At about 15 m. a spur projects from the mountain, and the line runs on the edge of a precipice of 1000 ft. The line makes a complete loop at Gayabari, above.

19½ m. **Tindharia** (R.), where railway workshops are situated, 2822 ft. above sea-level. At 25½ m. the line passes over the Pagla Jhora (mad water-course). The hillside at this point is continually sinking.

32 m. from Siliguri and 350 m. from Calcutta, **Kurseong** station (R., D.B.), there are tea-gardens here, with European managers and medical men residing on them. Kurseong is 4864 ft. above sea-level. In damp weather leeches are numerous. The old Punkabari road crosses the line here, zigzags up the hill for nearly 2000 ft., and runs to Jor Bungalow nearly parallel to the railway. A little above Kurseong is the Jesuit Training College; and higher still are the Dowhill and St. Helen's Schools for girls, and the Victoria School for boys: 2 m. from Kurseong is the Goethals School, established by the Irish Brothers.

At 41 m. is Sonada Brewery.

At 46 m. is Jor Bungalow, a collection of shops and huts on the narrow ridge or saddle which joins the Darjeeling spur to the Senchal Hill. Here the road to Kalimpong branches off, there are also roads to the Darjeeling Golf-course, near Tiger Hill, to the Darjeeling Waterworks, and to the Katapahar and Jalapahar Cantonments. At **Ghoom** station (47 m.) the main road to the Nepal frontier starts, and near by the Auckland road to Darjeeling joins the railway. Ghoom station is the highest point on the railway, 7407 ft. About ½ m. from it, just above the road to the Nepal frontier, is the Buddhist monastery of the Yellow Sect, constructed by Lama Sherab Gyantso, near which is the interesting Buddhist burning-ghat. From Ghoom, the train runs downhill to Darjeeling.

51 m. from Siliguri, **DARJEELING** * (place or town of the thunderbolt). Rickshaws, dandies, and ponies can be hired just outside, and the Railway Company send up passengers' luggage to any part of the town.

A ropeway runs to Biban Bari in the Little Rangit Valley, 4300 ft below, with one span of 4680 ft

The beauty of its situation, upon a ridge (about 7146 ft high) above the bed of the Great Rangit River, a tributary of the Tista, the mountain-side scattered over with villas and bungalows, and the colossal background of Himalayan giants towering above it, together with its moderate temperature, tend to make Darjeeling a most agreeable residence, and have rendered it the most important sanatorium of Bengal[1] It is the summer headquarters of the Bengal Government

From Darjeeling the highest **Mountain Peaks** in the world can be seen Of these the loftiest is *Mount Everest*, 29,002 ft, visible from *Tiger Hill*, 8514 ft (a 6-m ride from Darjeeling) or from *Jalapahar*, the military Cantonment, though the distance is at least 120 m Other peaks seen are the Kinchinjanga (28,146 ft. high and 45 m distant), to the W. of it, Kabru (24,002 ft.) and Jano (25,294 ft), to the E of it, Pandim, like a horn (22,010 ft), with the "King's Minister," Narsingh (19,130 ft), in front of it, and only 35 m distant, and farther E again the fine snowy peak of Simolchu (22,620 ft) Much of the surface of the highest peaks is too sheer for snow to lie.

The view of unrivalled **Mountain Scenery** is unspeakably grand, in October to December and March to May, but often clouds veil the highest peaks for days together, and there is no certainty of a view of Kinchinjanga. The eye looks across a vast chasm to the line of perpetual snow, about 17,000 ft high, on the side of the stupendous Kinchinjanga There is one special feature in the summit of Kinchinjanga, a wall of granite which appears to divide the summit into two portions The effect is much more striking than if it were one great mass of snow The grandeur of this scene is heightened by the colouring given to it by the rising and setting sun or by the moon

The "non-regulated" **District of Darjeeling** (a "partially excluded area") is divided into two portions—the N. is from 4000 ft. to 9000 ft. above the sea-level, the S., or *Morang*, consists of the foothills of the Himalayas and the plains to the District of Rangpur Mountains which rise to between *12,000 ft and 13,000 ft divide it* from Nepal It was ceded by deed with the Raja of Sikkim in 1835 When Dr Campbell took charge, in 1839, there were only twenty families in the whole district, he remained Superintendent for twenty-two years, and established a convalescent depot at **Jalapahar**, the *Military Cantonment* S of Darjeeling

Darjeeling suffered severely from the earthquake of 1897 and a great storm and landslip of September 1899 On the *Mall* is the bandstand and a drinking fountain erected to the memory of Sir Ashley Eden, Lieutenant-Governor 1877-82. The *Eden Sanatorium* or *Convalescent Hospital* is conspicuous. At the Chowrasta is Brabourne Park (1939).

The foundation-stone of *St Andrew's Church* was laid by Bishop Milman in 1870. The old Church dated from 1843. There are tablets in it to George

[1] For Darjeeling and the neighbourhood, see *Tours in Sikkim and the Darjeeling District*, by Percy Brown (and ed., Calcutta, 1925); *Himalayan Journals*, by Sir Joseph Hooker (1854, reprint 1905), *The Lands of the Thunderbolt Sikhim, Chumbi and Bhutan*, by the Earl of Ronaldshay (Constable, 1923), *Round Kangchenjunga*, by Douglas Freshfield (Arnold, 1903); Newman's *Guide to Darjeeling* (7th Edition, Calcutta).

W. Aylmer Lloyd, C.B., Lieut.-General, who visited the place 1829 as a Captain and died 1865, aged 76. To his influence with the Raja Bengal is indebted Another tablet runs—

In Memoriam
CHARLOTTE, COUNTESS CANNING,
November 1862

There are also a *Union Chapel* in Auckland Road, the Scotch Kirk (St Columba's), and other places of Christian worship

About ½ m beyond the Church is Government House, the residence of the Governor, who spends May and June, September and October here St Paul's (1864) and St Joseph's Schools at North Point (1888) are large establishments, there are also the Diocesan Girls' High School, the Loretto Convent School for girls, and Queen's Hill School for girls, besides several private schools Near the Secretariat, and below the Victoria Pleasance Park (1902) is a Museum (1902) containing collections of butterflies, moths, wasps, and ants

The principal **Bazar** is in the centre of the town, on Saturdays and Sundays it is thronged by picturesque folk from all parts — Lepchas, Limbus, Bhutias, Tibetans, Nepalese, Paharias, Bengalis, Kashmiris, and Marwaris

The top of the ridge above the church known as **Observatory Hill**, is called by the Buddhists Dor-jeling-gang, or the hill of the thunderbolt town. It was once crowned by a monastery, constructed by Lama Dor-je Legdenla Buddhists and others offer prayers, ring bells, beat tom-toms, and make offerings In the centre of the shrine are carved stones of Hindu - Buddhist deities, surrounded by bamboo poles, from which flutter paper of different colours, and cloth prayer flags printed with the horses of wind and prayers for luck. Some way below the ridge on the E. side is an interesting Buddhist *Chorten*, or chaitya, and a Buddhist monastery of the Red Sect of a distinctly Tibetan type in the picturesque village of the Bhutia Basti. It is worthy of a visit, not only on account of the temple, but also to see the hill people who inhabit the small village. The Birch Hill Park for walks, picnics, and views is a little over a mile from the railway station The Victoria Falls are near Rosebank, the residence of the Maharajadhiraja Bahadur of Burdwan

The Botanical Gardens are immediately below the Eden Sanatorium, on its W side Besides trees, there are collections of ferns and orchids

The chief industry of the Darjeeling District is the cultivation and manufacture of *Tea* (see also p 491) The first tea-garden was opened in 1850

There is little game in the neighbourhood of Darjeeling, but for the botanist, and the lover of the picturesque, there are endless excursions There are 600 varieties of butterflies

Darjeeling is lit by electric light, from a hydro-electric power station at Sidrapong, 3000 ft below on the W side of the spur The distance is about 5 m, and a tea-garden is passed through on the way.

At 1000 ft below Darjeeling is a fine wooded spur called **Lebong**, where English fruit-trees flourish, and the tea-plant also succeeds admirably. at Lebong is the Cantonment, with a large parade ground, used for gymkhanas and races. Below is the village of Ging, surrounded by slopes cultivated principally with tea, also with rice, maize, and millet Above the

Ging village there is a Buddhist monastery of the Zok-chen-pa Red Sect, a branch of the great Pamiongchi monastery of Sikhim

Excursions from Darjeeling.

(1) With the aid of a pony, an interesting expedition may be made W by **Tonglu** (Hunter's Farm) to **Phalut**, 49 m in the direction of the snows Coolies, laden, should do 12 m a day in the hills, the load is from 40 lb to 60 lb

The distances along the Singalila Ridge, boundary of Nepal, are to—

Jorpokri (7400 ft), 13 m
Tonglu (10,073 ft), 10 m
Sandakphu (11,929 ft), 14 m
Phalut (11,816 ft), 12½ m

The views are magnificent, especially from Sandakphu There is a good D B at each of these places (See Hints to Travellers for accommodation, obtained from the Deputy-Commissioner's office)

(2) Another excursion is to the **Suspension Bridge** *over the Great* **Rangit River** at Manjitar, to the N, and 6000 ft. below, which leads into Sikhim, the distance by the road being 11 m The zones of vegetation are clearly marked, first by the oak, chestnut, and magnolia, which grow from 10,000 ft. to 7000 ft.; secondly, below 6500 ft, by the *Alsophila gigantea*, or tree-fern (to be seen from the Himalayas to the Malayan Peninsula, in Java and Ceylon), thirdly, by the Calamus and Plectocomia palms (6500 ft is the upper limit of palms in Sikhim); fourthly, by the wild plantain, which in a lower elevation is replaced by a larger kind

At 6 m from Darjeeling are the Badamtam Tea-garden and a R.H.; at 2 m below again, an excellent view may be had of the Suspension Bridge.

At 10 m N.W from Darjeeling is the *junction of the* **Rangit** *with the* **Rongnye**. The Ranjit's chalky stream runs through a dense forest. The Rongnye, clear, almost black, comes tearing down from the top of Senchal, 7000 ft above Its roar is heard and its course is visible, but its channel is so deep that the stream itself is nowhere seen

Farther down is the *junction of the* **Rangit** *with the* **Teesta**, which is sea-green and muddy, while the Great Rangit is dark green and very clear The Teesta is much the broader, deeper, and more rapid Bathing is dangerous.

If time permits and the weather is favourable, it is worth while to follow the Teesta Valley down to Gielkhola stn and proceed thence to Siliguri by rail (see p 474).

(3) **Senchal**, 8163 ft, is clearly seen from Jalapahar, and is about 6 m. S.E It used to be a depot for European troops, but was abandoned on account of its climate and the effect on the troops The water for Darjeeling is taken in pipes from the Senchal springs. An expedition may be made to it, starting early in the morning. From Tiger Hill above Senchal, **Mount Everest** may be seen Senchal is comparatively easy of access, and from Jalapahar the path along the ridge of the mountains may be seen This path abounds in rare and beautiful plants, and traverses magnificent forests of oak, magnolia, and rhododendron.

Nearly thirty varieties of fern may be gathered on this excursion in the autumn. Grasses are very rare in these woods, except the dwarf bamboo

(4) **Kalimpong** (32 m.) can be reached by a pleasant ride through the forest from Darjeeling, by way of (14 m.) Lopchu, (4½ m.) Pashok, and (3 m.) Teesta Bridge, from which point the remainder of the journey to (10½ m.) Kalimpong can be made by car (p. 474).

Sikhim (Sikkim)

The country of **Sikhim** was invaded by Gurkhas in 1810, but restored in 1814 by the British.

Europeans visiting Sikhim are required to carry a pass, and otherwise will not be allowed beyond the Darjeeling frontier. Passes are issued by the Deputy-Commissioner, Darjeeling. Applications for a licence to shoot should be made to the General Secretary to H.H. the Maharaja of Sikhim, Gangtok.

The Capital of the State of Sikhim (Sukhim or "New-house"; in Tibetan, Den-jong, or "the rice country"), is Gangtok (5800 ft.), the residence of the Maharaja and the Political Officer. The Maharaja Sir Tashi Namgyal, K.C.S.I., K.C.I.E. (born 1893), youngest son of Maharaja Sir Thutob Namgyal, K.C.I.E., succeeded his half-brother, Maharaja Sidkeong Namgyal, C.I.E., in December 1914.

There are, in Sikhim, only 528 villages and 14,777 occupied houses. The high mountains, as viewed from Darjeeling, have been described above (p. 476), but the lower hills also contain much beautiful scenery, and possess features of special value for all who are interested in the pursuit of botanical studies, butterflies, and some branches of zoology (reptiles, birds, mammals). "Sikhim"[1] is estimated to contain about 4000 species of flowering plants under 160 natural orders; also 250 ferns and their allies, of which eight are tree-ferns." It has also 660 recorded species of orchids, 20 of palms, and about 23 of bamboos. The flora and the trees vary according to the three zones—the subtropical from 700 ft. to 4000 ft. elevation, the temperate from 4000 ft. to 11,500 ft., the Alpine from 11,500 ft. to 18,000 ft. Butterflies are extremely abundant, distributed among about 600 species, the moths are estimated at 7000 species.

[1] *Imperial Gazetteer*, I, 166.

The 44 monasteries present objects of interest to students of religions. Lamaism, or Tibetan Buddhism (a mixture of orthodox Buddhism with a preponderating amount of mythology, mysticism, and magic), is the State religion of Sikhim, professed by a large number of the inhabitants. The monks number about 1200. The principal monasteries are—(1) Sangachelling, (2) Pamiongchi, (3) Tashiding; (4) Phodang, at Tumlong, (5) Rhumtek, 8 m. from Gangtok. Many *chortens* (cenotaphs in memory of Buddha or canonised saints) are met with, as well as *mendongs*, or low prayer-walls, faced with blocks bearing the mystic sentence *om mani padme hum* and other prayers, in addition to rough paintings of the deities.

The abnormal rainfall of Sikhim, ranging from 30 in. annually in the dry upper valleys, but reaching to 180 in. in some other parts, renders travelling arduous and disagreeable during the monsoon months. Travellers to the snow-mountains should choose May or October.

The main route into Sikhim is *viâ* Siliguri and the cart-road alongside the course of the Teesta River to Rungpo, and up the course of the Rongnye River to Gangtok. The Darjeeling-Himalayan Railway extension runs from Siliguri to Gielkhola (p. 474).

From Darjeeling Sikhim can be entered by four routes—(*a*) to Phalut (already mentioned) and on to Chiabhanjan, thence Northwards to Yampung, Jongri, and the snow-line, or Eastwards to Dentam and the Sangachelling, Pamiongchi, and Tashiding monasteries, (*b*) by the suspension bridge over the Rummam River, N of Darjeeling, to Chakung, N. of and near to that river, and to the same monasteries, (*c*) by the suspension bridge at Manjitar, over the Great Rangit, to Namchi, Temi, Gangtok, and on to Tumlong, (*d*) by Pashoke and the Teesta suspension bridge to Kalimpong, Rikyisum, Pedong, and Rhenok, where the road bifurcates, one leading N to Pakyong and Gangtok, the other N E to Chumbi, in Tibet, *vid* Sedonchen, Lingtu and the Jelep La Pass

From Gangtok the track is continued Northwards to Toong and Chungtang, where it divides into the Lachen and Lachung valleys The path up the Lachen leads to Tangu, Gyangong, and the Kangra La and Sebu La passes into Tibet, by the Lachung to the Ghora-la and Donkya-la

These routes are further indicated in the following statements On all of them there are D Bs in charge of *chaukidars* (custodians). There are four beds in each bungalow, and the simplest furniture, but no reliable food-supply. Provisions and bedding must be taken, also saddles for use on hired ponies, and glare glasses. Coolies should manage 12 miles a day with 40-60 lb. loads No journey should be undertaken without previous communication with the Deputy-Commissioner of Darjeeling or the Political Officer in Sikhim (address Gangtok).

The bungalows are available only to persons provided with passes, issued, for the Sikhim bungalows, by the Political Officer in Sikhim or by the Deputy-Commissioner of Darjeeling; for the Darjeeling bungalows, by the Deputy-Commissioner of Darjeeling; for certain Darjeeling bungalows, by the Executive Engineer, P.W D, Darjeeling.

A separate pass must be obtained for each occupant, or for a party, for each bungalow, whether going or returning

Fees.—Eight annas for each person for occupation during the day, up to a maximum charge of Rs.6 Rs 2 per night for each occupant For the whole bungalow at Gangtok (both blocks), and for Rangpo, it is Rs 12, with 8 as. per head for electric light at Gangtok (For Senchal, Rs 3 per night per person) Fees are payable in advance, on the submission of the application for the pass

Details as to *Fees*, *Furniture*, *Provisions*, *Servants*, *Tours*, and *Rates* are fully set out in the official Hints to Travellers, obtainable from the Deputy-Commissioner of Darjeeling The Progress Association organises tours.

Routes into and in Sikhim.

Map faces p 482.

(D B. = Dak Bungalow,
My = Monastery)

Route I.

There is a railway as well as a cart-road from Siliguri to the Teesta Bridge, and roads fit for motors from the Teesta Bridge to (*a*) Gangtok, (*b*) near Pedong

Siliguri (D.B) by road	16½ m	to
Kalijhora (D.B)	5½	,,
Berrik (D B)	4½	,,
Riang (D B.)	5½	,,
Teesta Bridge (D.B.)		

Route II.

Darjeeling	14	m. to
Lopchu (D B.)	4½	,,
Pashoke (D B.)	4	,,
Teesta Bridge (D.B)	3	,,
Melli (D.B)	11	,,
Rungpo (D.B)	5	,,
Sankokola (Bardang) (D B)	7	,,
Martam (D B)	12	,,
Gangtok (D B)	13	,,
(Raiotdong) Dikchu (D.B)	11	,,
Singhik (D B)	9	,,
Toong (D B)	5	,,
Chungtong (My , D B)		

From—

Chungtong (My , D.B)
(*a*) 12 m to Lachen (D B), 13 ,, *Tangu (D.B),
(*b*) 10 m to *Lachung (D B), 18 m to Yumtang
From Gangtok to Tumlong (and no farther), 13 m

* Tents are required beyond Tangu and Yumtang

Route III.

Teesta Bridge (D B) (6 m by bridle-path)	10	m to
Kalimpong (D.B)	12	m to
Rikyisum (D B.) 7 m to Labah 2 ,, Pashiting (a forest bungalow here)	Branch to the Duars	

Into Tibet from—

Kalimpong (D B)	12	m to
Pedong (D B.)	5	,,
Rhenok (D B)	9	,,
Pakyong (D.B.) 11 m to Gangtok (D.B.)	Junction Road to Gangtok	

From—

Rhenok (D.B.)	3	m. to
Ari (D.B.)	4	,,
Rongli (D.B.)	9	,,
Sedonchen (D.B.)	9	,,
Gnatong (D.B.)	5	,,
*Kupup (D.B.)	10	,,

* 16 m to New Yatung

Changu (D.B.)	12	m. to
Champithang (D.B.) 11 m to Chumbi (D.B.) 131 ,, Gyantse (see Map)	in Tibet	

From—

Changu (D.B)	11	m. to
(Karponang) Pusum (D B)	9	,,
Gangtok (D B.)		

Route IV (Circular)

Darjeeling	12½	m. to
Jorpokri (D B)	10	,,
Tonglu (D B)	14	,,
Sandakphu (D B)	12½	,,
Phalut (D B)	17	,,
Dentam (D B)	11	,,
Pamiongchi (My , D B)	10	,,
Rinchinpong (My , D B)	13	,,
Chakung (D B)	20½	
Darjeeling		

(There is a direct road from Dentam (13 m) to Rinchinpong (My , D B)

Alternative Route

Pamiongchi (My., D B)	10	m to
Kewzing (D B)	10	,,
Temi (D.B)	11	,,
Namchi (My , D B)	7	,,
Manjitar (D B)	3	,,
Badamtam (D B)	7½	,,
Darjeeling		

Branch from—

Temi (D B), (by an iron suspension bridge over the Teesta)	11	m to
Song (D B)	14	,,
Gangtok		

Routes into Tibet (Gyantse)

Permission to cross the frontier into Tibet must be obtained from the Political Officer in Sikhim at Gangtok *Shooting and sport of all kinds are prohibited* The expedition should not be attempted between September and May.

Kalimpong (p. 474) makes the best starting-point The track goes N E. past Pedong and Rhenok, to Rongli, Sedonchen

and Gnatong (12,000 ft.) as in Route III. Between Gnatong and Champithang (in Tibet) the Jelepla is crossed (14,400 ft), Chumbi is 11 m. from Champithang and Phari Jong (14,300 ft.) is 28 m. farther on The route thence to Gyantse (13,200 ft, D.B.), where the British Tibetan Trade Agent resides, crosses the Tang-la (15,200 ft.) and, 42 m. beyond, the Kharola (16,500 ft.) and then the Khamba-la (16,800 ft) Gyantse (131 m from Chumbi) is the limit (see Table on Map), as permission is not given to visit Lhasa (12,000 ft above sea-level, 359 m from Siliguri).

Transport animals can be arranged for at the Himalayan Hotel, Kalimpong, usual rate, Rs 12-3-0 to Gnatong, where it is cheaper to arrange for a fresh set with the assistance of the British Trade Agent (one clear day's notice should be given) Passes for D Bs in Tibet are issued by the British Trade Agent at Gnatong

(2) Calcutta to Khulna or Goalundo by Steamer and return by rail or vice versa.

These trips may fill in a few days at a cost less than hotel charges in Calcutta The steamers traverse creeks in the Delta of the Ganges, passing from the Hooghly to the Brahmaputra There is a considerable traffic on this route, steamers or launches towing flats usually loaded with jute, and country boats also. The Cachar Sunderbans Service, from Armenian Ghat, and the Assam Sunderbans Despatch Service, from Juggernaut Ghat, do not run to a time-table, but details can be obtained from MacNeill & Co., 2 Fairlie Place, Calcutta, or from the Publicity Officer, B A. Railway, Koilaghat Street.

An interesting sight is the Water Hyacinth, floating on the creeks, especially when it is in flower. It is said that this was introduced from California as a pot plant in the Calcutta market. Like the rabbit in Australia, or the Lantana in Coorg, it has spread like wildfire, choking the smaller channels, filling the railway borrowpits, and creeping over the fields Its roots enable it to flourish in water or on land, and it has presented a serious problem

The railway runs *viâ* **Jessore** (D B K) 76 m by road from Calcutta

(3) Calcutta to Dacca *viâ* Goalundo and Naraingani.

The Eastern Bengal Railway was opened 1862-64, Sir Bradford Leslie being chief engineer

[For the journey from Calcutta to **Poradaha** junction station (103 m.) see p 473.]

111 m. **Kushtia** (D B K)

114 m, near Kumarkhali, the Gorai River, a spill of the Ganges, is crossed by a bridge 1372 ft long, built 1871

136 m Kalukhali, branches to Faridpur (30 m) and Bhatiapara (47 m)

155 m **Goalundo Ghat** is near the junction of the Ganges and Brahmaputra rivers, which below this point are called first the Padma, and then the Meghna river, and form a body of water so wide across that in the centre the low shores are scarcely visible Above the confluence the Brahmaputra is called the Jumna locally.

Goalundo has no permanent buildings, as the river-banks at

this point change constantly. Lines radiate from Rajbari Stn, and the site of the terminal station is shifted usually twice a year

"About £130,000 had been spent upon these protective works, and it was hoped that engineering skill had conquered the violence of the Gangetic floods But in August 1875 the solid masonry spurs, the railway station, and the magistrate's court, were all swept away, and deep water covered their site." (Hunter)

There is a regular daily service by steamer to *Narayanganj* for *Dacca* and to *Chandpur* for *Chittagong* and *Assam* by railway Cabin accommodation and messing arrangements are very good

Narayanganj (D B), situated on the Lakhya, an arm of the Meghna, is the port of Dacca, and has a large trade, particularly in jute Near it there are some old forts of Mir Jumla's, and opposite the town, on the E bank of the Lakhya, a celebrated shrine of Kadam Rasul

Near Munshiganj, Idrakpur fort, built by Mir Jumla (1660), is still in good condition, and the Subdivisional officer's residence has been built on the roof

From Narayanganj the railway (opened 1885) runs, 11 m. to

Dacca (23° 43′ N and 90° 24′ E) (D B K., good, near ry stn). The city, with a population in 1941 of 213,218, lies on the N. bank of the Buriganga River, along which it extends for nearly 4 m from beyond the Lal Bagh on the W to the suspension bridge over the Dholai Khal (Creek) on the E, presenting an imposing river frontage The Brahmaputra is supposed to have run E. of the city and to have been diverted by a cultivator, who cut through a small bank.

Along the central portion of the river front runs a fine promenade, called the Buckland Bund, after Mr C. T Buckland, who was Commissioner, 1862-67 Behind it is the Ahsan Manzil palace of the Nawabs of Dacca, where the French factory stood Here, too, within a short distance, are many important buildings, the Bank, the Commissioner's office (which was once the European Club), the Collegiate School (formerly Dacca College), on the site of the English factory, the Courts and Government cutcherries, the English Church, the Baptist Mission buildings and the Roman Catholic Cathedral A Church of Austin Friars is recorded in 1666

At the Sadar Ghat on the Buckland Bund stands an ancient cannon, by tradition a male gun, "Kale Jham Jhain," whose mate, Bibi Mariam, lies at the bottom of the river, and calls to him every night, and thus causes the mysterious sound known as the "Barisal guns" A broad road runs due N. from the Sadar Ghat to the Civil Station of Ramna

The Bara (great) Katra faces the bank of the river It was built in 1644 by the Dewan Mir Abdul Kasim, and seems to have been intended for a royal residence From the roof an interesting view of the city and river is to be had About 100 yds. E. of this is the Chhota (little) Katra, built by Shaista Khan in 1664

S.E of these buildings is the Mitford Hospital, on the site of the Dutch factory A short distance to the N W is the Lal Bagh fort, built by Muhammad Azam, third son of Aurangzeb, when Viceroy of Bengal, in 1678, but left unfinished. Aurangzeb afterwards gave it as a *Jagir* to Shaista Khan, whose daughter, Pari Bibi, lies buried in a fine tomb within the fort Here, in

1857, two companies of the 73rd Bengal Infantry, having become disaffected, were defeated by sailors of the Indian Navy, helped by the Dacca Volunteers.

Amongst many other interesting monuments at Dacca are: the *Husam Dalan*, built by Mir Murad in 1642, where the Muharram is celebrated annually with intense fervour, the *Temple of Dhakeswari*, the most famous Hindu shrine in these parts, the *Sat Ganbaz* (seven domes) mosque, some 6 m W of Dacca, said to have been built by Shaista Khan, with the Sat Gumbaz Mausoleum 100 yds E. of it, containing two tombs, where two of his daughters are said to be buried. There is a good museum of Archæology and Natural History at Ramna

When the Generals of Akbar conquered Eastern Bengal in 1575, the capital of the province was at Sonargaon, some 20 m E of Dacca, where there are still many interesting ruins In the reign of Jahangir the capital was transferred to Dacca, by the Governor, Islam Khan, grandson of Shaikh Salim Chishti The English factors settled here first in 1666, and not long afterwards were subjected to great oppression by the Governor, Shaista Khan, uncle of the Emperor Aurangzeb In 1704 the Governor moved to Murshidabad, and the glory of Dacca grew dim, until (1905-11) it revived while Dacca was capital of the new province of Eastern Bengal and Assam European officials gradually left the old town for the new quarter of **Ramna**, where two Secretariats and two Government Houses, of which the larger is now the University Court House, were erected.

Dacca again became capital of E Bengal (Pakistan) in 1947

At Ramna, N. and W., there is a Maidan The Club is to the N.: the Dacca University area lies mainly to the S and W. The University of Dacca was opened in 1921. It inherited the old Dacca College (1842) The Museum (1913) and Library of old Sanskrit MSS are well worth a visit.

Shell bracelets of Dacca are famous, and may be seen here in the making, but the flimsy muslins "*abrawan*," "*bafthawa*," "*Shabnam*," "running water," "woven air," "evening dew," once worn by ladies of rank, are seldom produced, and the art of weaving them seems to be dying Silver filigree work of good quality is done, and there are some promising new industries such as the making of buttons [1]

At Kurmitola, 10 m distant by road, a forest begins, which stretches N for over 100 m to Tangail Leopards may frequently be found within 10 m. of Dacca, and tigers a little further off Duck are plentiful in parts, but snipe are very scarce

In the rains much of Dacca District is under water, but this helps the jute to grow and also to be "retted"

The railway from Dacca proceeds N to

14 m Tangi junction for Bhairab Bazar, with the King George VI bridge (1937) over the Meghna river with seven spans of 336 ft and six of 105 ft

76 m **Mymensingh** junction for Bhairab Bazar, crossing the old Brahmaputra River (now running to the W) Mymensingh (Nusseerabad) produces a quarter of the total jute crop of Bengal.

[1] See *The Romance of an Eastern Capital*, by F B Bradley Birt (2nd ed. G. Bell, 1914)

108 m. Singhjani junction for

136 m. **Jagannathganj** The Assam steamer, leaving Goalundo in the early morning, reaches Jagannathganj in the forenoon Steamer to Sirajganj Ghat (p 474)

From **Singhjani** the line (opened 1912) runs to Bahadurabad Ghat (railway steamer and wagon ferry to Tistamukh Ghat) for Santahar or Lalmanirhat

(4) Calcutta by Goalundo and Chandpur to Chittagong by Assam-Bengal Railway

The route as far as *Goalundo* is the same as that taken by the Dacca mail (p 482) From Goalundo there is a regular service of steamers to *Chandpur* (D B), which connects with the mail train, on the former Assam-Bengal Railway (opened 1895) to

32 m **Laksam** junction station. Here a S E branch runs to

81 m **Chittagong** jn (D B K), with 2 branches, on the Dohazari branch the Karnaphuli River is crossed by a bridge 2104 ft long (1931) The revenue of the District was assigned by Nawab Mir Kasim in 1760. It was once part of the Hindu kingdom of Tippera, was burnt by the Portuguese in 1538, and recaptured by the Mughals from the Raja of Arakan in 1668 Inroads by the Burmese caused the First Burmese War Each house is on a separate hillock

The port (Porto Grande) 12 m. up the Karnaphuli river, has berths for three steamers at the railway jetties with two moorings in the stream Steamer service up the river to Rangamati, headquarters of the Chittagong Hill Tracts Sea-going steamers and launches to Cox's Bazar (founded by Capt. Cox, Madras Army), excellent sea-bathing), Maungdaw, Akyab, and Rangoon.

From **Laksam** junction branch lines run S. to *Noakhali*, 31 m (a tidal wave, 1879, caused enormous loss), N. to 15 m, *Comilla* (D B), headquarters of the Tippera District, 44 m., *Akhaura*, 124 m, *Kulaura*, and 171 m, **Badarpur** (opened in 1896).

From Akhaura a branch runs N W to Ashuganj Ghat, on the Meghna river, with bifurcation from that place to Dacca and Mymensingh.

From Badarpur a branch line, 18 m, runs to

Silchar (D B K), hdqrs of the **Cachar** District, annexed in 1830 and now part of Assam. Branch line from Kulaura to Sylhet Ghat, 30 m, for **Sylhet** (D B K), on the lower valley of the Surma River, and for Aijal in the Lushai Hills There is a steamer service from Narayanganj to Fenchuganj Ghat on this branch, also from Markuli to Chhatak (I B.) throughout the year, and a feeder and steamer service from Chhatak to Sylhet during the rainy season. Motor road to Shillong (86 m) Both Sylhet and Silchar have suffered severely from earthquakes, as in 1897 The two Districts of Sylhet and Cachar form between them the **Surma Valley**. Cachar, which is in the E. angle, contains one hill subdivision, the N Cachar Hills (p. 491); Sylhet is wide and flat, except in the extreme N. and S. The Keane road bridge crosses the Surma River. There are numerous tea-gardens in the Surma Valley and the planters form an Auxiliary Force of Light Horse

The main line of the Bengal-Assam Railway continues N. from Badarpur, crossing the Barak River by a bridge 1368 ft. long (1899) over the hill section to (115 m.) **Lumding Junction** (p 491).

(5) **Calcutta to Shillong and the Assam Valley.** *Circular Tour, Calcutta (Sealdah) by B A Ry to Santahar (or Parbatipur) Junction, Amingaon, and Gauhati (for Shillong), thence by Bengal-Assam Ry to Lumding Junction, Manipur Road (for Manipur), Tinsukia Junction and Dibrugarh Return by Bengal-Assam Ry to Lumding Junction, thence to Badarpur, Laksam Junction, Chandpur, Goalundo and Calcutta (Sealdah) · alternative route by steamer on the Brahmaputra River*

The "through" river services from Goalundo, started by the Assam Coy (1839), transferred to the India General Steam Navigation Coy. (1847), still find favour, and no pleasanter method of travel can be suggested. The messing arrangements are excellent The cold wind caused by the movement of the vessel may be penetrating, and warm clothes may be necessary

The circular tour, by rail, comprises the whole of the Assam Valley and includes a visit to Shillong and Manipur.

Assam was under the Lieutenant-Governor of Bengal until 1874-5, when the Districts of the Upper Brahmaputra Valley and the adjacent hills, with Cachar and Sylhet (the Surma Valley), were constituted a separate Province under a Chief Commissioner. In 1905 a Province of Eastern Bengal and Assam was created under a Lieutenant-Governor. In 1912 the Eastern Bengal Districts were rejoined to Bengal (to form the Governorship of Bengal). The old Province of Assam was reconstituted, with twelve Districts and the Manipur State, under a Chief Commissioner, and from 1921 under a Governor, now Sir Muhammad Salah Akbar Hydari (1947). "Tribal religions" are mainly to be found in the hill-tracts (Garos, Nagas, Khasis, etc.)

"Assam owes its importance to its situation on the N E frontier of India. It is surrounded by mountainous ranges on three sides —on the N are the Himalayas, shutting off the table-lands of Bhutan and Tibet, on the N E. is a series of hills which form a barrier between the Upper Brahmaputra Valley and the more or less independent Mongolian tribes who live W of the boundary of China, on the E and S E lie the hills which march with those forming the limits of the Province of Burma and the State of Hill Tippera, on the W and S lies the Province of Bengal, on to the huge plains of which debouch the two valleys of the Brahmaputra and the Surma, which form the plains of Assam [1]

The valleys are separated by the Khasia Hills and the Garo range, which projects westward and causes a bend in the Brahmaputra The physical features of the Province are full of variety. The valley of the Brahmaputra, otherwise known as the Assam valley, on the N is an alluvial plain about 450 m in length and 50 m. in average breadth, so that one never loses sight of the hills on either side Mongolian influences are present everywhere, except in the greater

[1] Assam Report, census of 1911 Anyone specially interested in Assam should consult Sir E. A Gait's *History of Assam* (Calcutta, 2nd Edn., 1926) See also *Sport and Service in Assam and Elsewhere*, by Lt -Col Alban Wilson (Hutchinson, 1924).

part of Sylhet. In language there is perhaps more diversity on the Eastern frontier than exists elsewhere in India."

Calcutta to Gauhati, Shillong, and Dibrugarh.

The direct railway route to Gauhati from Calcutta (Sealdah) follows the same course as that to Darjeeling (p 474) as far as

233 m. **Parbatipur** junction (R.), where passengers change to the metre-gauge section

The line (built 1879) runs E past **Rangpur** (D B.), **Kaunia** (D B), where it joins a line from Santahar

272 m **Teesta** jn, crossing the Teesta by a bridge 2100 ft long (1901) to

280 m **Lalmanirhat** (Refreshment-room and D.B), junction for the Bengal-Duars Ry (p 474, acquired by the State). The eleven Duars were ceded in 1864

288 m. **Gitaldaha** junction, a branch line runs N. to Cooch Behar (D B), Alipur Duar, Buxa Road, and Jainti. The Chief, H H Maharaja Sir Jagaddipendra Narayan Bhup Bahadur, K C I.E, born 1915, succeeded in 1922 The State (one of the Eastern States) is famous for its big-game shooting, and fishing in the Sankosh River, and has an area of 1318 sq m The Bhutias were expelled in 1772

The Assam line turns E again round the elbow of the Brahmaputra, crossing the Sankosh River at m 302, and the Gangadhar at m 311, to

312 m. **Golakganj** junction. (D B K)

Branch to (324 m.) **Dhubri**, on the Brahmaputra, whence steamers run to Gauhati by Goalpara, on the left bank, a journey of 130 m. Travellers can proceed by steamer to *Tezpur*, *Nigriting*, *Dibrugarh* (p. 491).

On the right (left river-bank) are the Garo Hills, and away on the left, if the atmosphere is clear, the grand range of the Himalayas towers in the background, with the wooded Bhutan Hills in the middle distance, the snowy range shows to special advantage at sunrise

At **Goalpara** (D B), situated at the foot of a conical hill (left bank), may be seen wild hill tribesmen, who come down from the mountains to trade

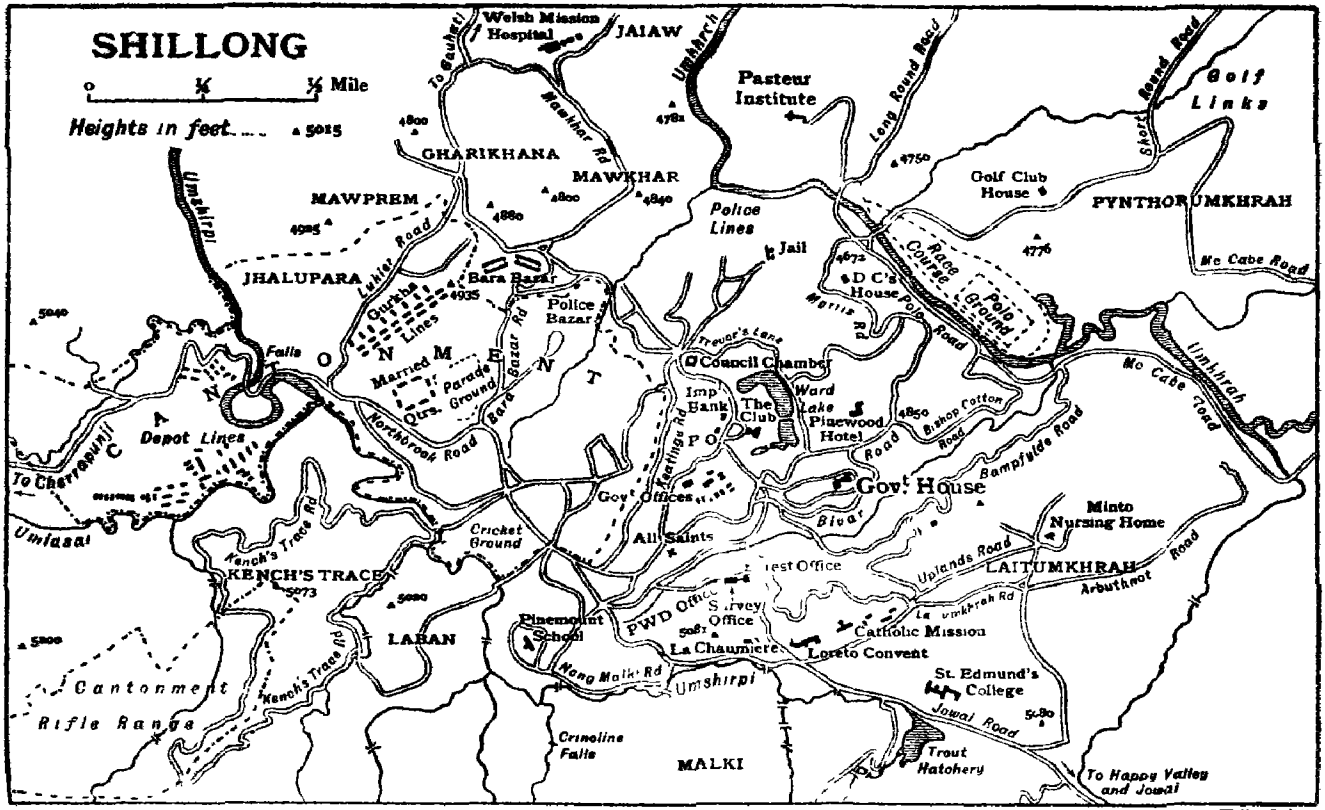
From Golakganj the line (built 1906-9) runs at a distance from the river, crossing many rivers flowing to the Brahmaputra, to (387 m) **Sorbhog**, round which the Kamrup district has been colonised by the overflow from Mymansingh district

452 m Rangiya junction for Rangapara (76 m, D B K) near Tezpur.

455 m. **Amingaon**, on the Brahmaputra, the river is crossed by a railway steamer to

456 m. **Pandu**, thence by rail or motor car to

461 m **Gauhati** (D B); once the capital of Koch Kings, then of the Ahom (Shan) kings (1681-1826), now the headquarters of Kamrup District It possesses a First-grade College (named after Sir Henry Cotton, Chief Commissioner of Assam from 1896 to 1902, whose bust by Armstead is in the hall), the Earle Law College, and a Museum (1917). The place was almost destroyed by the earthquake of 1897. It is situated on the S bank of the Brahmaputra, which here resembles a lake with wooded shores. In the middle of the river are the


SHILLONG
0 ¼ ½ Mile
Heights in feet
Welsh Mission Hospital
JAIAW
To Gauhati
Umkhrah
Pasteur Institute
Golf Links
Short Round Road
Long Round Road
GHARIKHANA
MAWKHAR
MAWPREM
Mawkhar Rd
Umshirpi
Lushai Road
Police Lines
Golf Club House
PYNTHORUMKHRAH
Jail
Race Course
Polo Ground
Mc Cabe Road
JHALUPARA
Bara Bazar
Police Bazar
Gurkha Lines
D C's House
Morris Rd
Polo Road
Falls
Married Qrs.
Parade Ground
Bara Bazar Rd
Trevor's Lane
Council Chamber
Imp Bank
The Club
Ward Lake
Pinewood Hotel
Bishop Cotton Road
Umkhrah
Depot Lines
Hornbrook Road
Meetings Rd
P O
To Cherrapunji
Govt Offices
Govt House
Bampfylde Road
Minto Nursing Home
Umiasai
Cricket Ground
All Saints
Uplands Road
Arbuthnot Road
KENCH'S TRACE
Kench's Trace Rd
Post Office
LAITUMKHRAH
PWD Office
Survey Office
La Umkhrah Rd
Catholic Mission
Pinemount School
LABAN
La Chaumiere
Loreto Convent
Nong Malki Rd
St. Edmund's College
Cantonment
Rifle Range
Kench's Trace Rd
Umshirpi
Jowai Road
Crinoline Falls
MALKI
Trout Hatchery
To Happy Valley and Jowai

island and temple of Umananda, and on the N. bank, on a projecting ridge, is another temple, on the top of a hill approached by winding flights of steps The celebrated temple of Kamakhya, on the Nilachal Hill, 2 m below the town, is the resort of pilgrims from all parts of India. The magnificent views repay a visit

River steamers call daily, *en route* up and down stream

There is a daily motor service by a good road (63 m) from Gauhati S to Shillong Motor owners should consult the Assam *Motor Manual for Shillong and Neighbourhood* (obtainable on ferry steamer at Amingaon)

The cars leave the railway stations at Pandu and Gauhati Cars for luggage and servants accompany the first-class passenger car, which makes the 67 m from Pandu to Shillong in 5 hrs —only hand baggage allowed in passenger cars The road from Gauhati runs S through tropical forest, rolling grassy downs, and great pine-woods

Shillong, headquarters of the Assam Administration, with a Pasteur Institute, has an altitude of 4900 ft. The entire town was wrecked by an earthquake in 1897, but it has been rebuilt amongst the pine-woods that clothe the hill The surrounding country is not unlike the lowlands of Scotland, there is every facility for riding and driving The temperature in the height of summer rarely reaches 80° F An Anglican Diocese was formed in 1914. A Welsh Presbyterian Mission has been established here for many years. There are R.C Colleges and Schools.

The Khasis, who inhabit the Khasi and Jaintia Hills, speak a language of which the nearest affinities are as far distant as Cambodia and Annam, they are remarkable also from the fact that descent to property is traced through the female line, as on the Malabar coast (p. 669). Their dancing, which takes place at certain festivals, especially during the month of June, is seen at its best at the village of Nong Krem, about 13 m from Shillong, and accessible by motor

Shillong is connected by motor roads with Sylhet (86 m) and **Cherrapunji** (36 m S , 4455 ft , D B K), famous for the highest average annual rainfall in the world—426 in In 1861 an extraordinary record amounted to 905 in., of which 366 in fell in July alone A cemetery includes many graves of soldiers who committed suicide in the old barracks A steep bridle path leads in 10 m. to Therria, in the Surma Valley, and so to Sylhet Motor services from Shillong to Cherrapunji and Sylhet, but not fully regulated

From Pandughat (Gauhati) to Manipur and Dibrugarh by the Bengal-Assam Railway.

From Pandu the Bengal-Assam Ry. runs past Gauhati to (62 m.) **Chaparmukh** Junction, whence there is a line to (17 m) **Nowgong** (D.B), 74 m. from Gauhati. The line continues to Silghat (D.B.), opposite Tezpur, on the Brahmaputra, 103 m. from Gauhati. The method of transit for heavy packages is usually by steamer from Calcutta to Silghat, thence by road (32 m) or train to Nowgong.

The Assam Trunk Road (Gauhati-Dibrugarh) is motorable all the year round. Roads generally are metalled and bridged.

From Chaparmukh the line pro-

ceeds to (118 m. from Gauhati) **Lumding** Junction, where it connects with the hill section from Badarpur Junction (p 486). From Lumding Junction the line runs E. to (33 m) **Manipur Road** (Dimapur) station. There are carved monolithic remains in the old Kachari fort at Dimapur

Manipur

From Manipur Road (Dimapur) the main road to Imphal, Manipur (134 m) runs S not far from the (abandoned) fort of **Samaguting** and **Kohima** (46 m ; alt 4700 ft, the limit of Japanese invasion) The road is metalled throughout and motor lorries (S) run between Manipur Road and Imphal A lorry can be hired Motor owners can make the trip comfortably in one day, providing there are no obstacles due to rain. The road ascends to 6700 ft, and then descends to the valley, the last 15 m. being level The distance to Imphal is 134 m, and there are twelve well-furnished R Hs (no servants) at convenient distances. At Manipur Road there are a D.B. and small bazar, and at Kohima (46 m) supplies are also obtainable, but these are the only two places where anything can be procured.

Imphal, the capital of the State of **Manipur**, lies in a lovely valley, which is some 60 m long and 30 m wide, at a height of 2600 ft. above sea-level. The history begins in 1714, although tradition goes back for centuries before then Burmese invasions were frequent, but the Treaty of Yandabo (1826) brought the State under British protection The State covers an area of approximately 8456 sq m. The Maharaja, H H. Bodh Chandra Singh, born 1908, succeeded in 1941.

The people of Manipur, original Meithei, are classed as Kshatriyas The scenery on the valley and on the roads leading to it is most beautiful. The valley is surrounded by hills, which rise from 2500 ft. to 5000 ft. above it The whole drainage of the valley escapes at the southern end through a gorge in the hills only a few hundred yards wide. There are several large lakes, on which in the cold weather magnificent duck shooting is obtainable. In the swamps round these lakes a species of Thamin is to be found, but only from March to May, when the swamps are at their driest.

The people of Manipur are very fond of games. Hockey and polo are played everywhere, and the religious dances of the Nagas, Kukes, etc, are most interesting spectacles Sixty-oar boat-races are rowed on the Palace moat

From Imphal a good bridle-road, with R Hs (unfurnished and temporary) at every 13 m or 14 m., leads to (125 m) Silchar (p. 485) and a military road (1944) to Sittaung in Burma, on the River Chindwin (102 m). The journey from Silchar to Imphal occupies nine days.

If ample notice is given to the Political Agent, carts can be arranged for at Manipur Road station and coolies at Silchar. A cart carries 10 maunds, coolies carry 60 lb in seven days

From Manipur Road the line runs N. to Farkating (branch to Jorhat), on to Titabar and Mariani (from Titabar and Mariani two short branches of the Jorhat Ry. run *viâ* Chenimara Jn to Jorhat and thence to Kokilamukh on the Brahmaputra). From Mariani it is 33 m. by rail to Simuluguri jn for two short lines, N. to Khowang and S. to Naginimara, a coal-field

63 m. from Simuluguri is **Tinsukia** (D.B K.), whence one branch, dividing at Makum, runs N. to Talap (D.B) and to Saikhoaghat, on the river Luhit, opposite Sadiya, starting-point for the Burma road through the Hukong Valley (an attack from Singpho in 1830 was repelled) Another branch runs S through Digboi to Margherita (D B), called after the Queen of Italy, where the main Assam coal-fields are situated 5 m farther E the line ends at Ledo, which is the nearest station for **Tikak**; here the coal is dug out of the hillside. To the N W. of Margherita the colliery line has been extended to Tipong and Lakhapani (8 m) where new seams are being opened. At Digboi are oilfields and refineries

From Tinsukia another branch (27 m) connects with

Dibrugarh, (D B K), hdqrs of the Lakhimpur District, and of the Assam Valley Light Horse It is also the terminus of the river steamer service, with a large European population and a Berry White Medical School (1892)

From Dibrugarh the return journey to Calcutta can be made by river steamer to Gauhati, and thence by train from Amingaon, as on the upward route (p 487) Alternatively the journey can be taken by rail from Dibrugarh to Tinsukia and thence to (207 m) Lumding and (322 m) Badarpur by the hill section of the Bengal-Assam Railway

The hill section is 115 miles long, the distance is shown in Bradshaw as double this, because the high cost of construction has caused double the ordinary fare to be charged. Opened in 1904, it runs S. through the North Cachar Hills, which have a normal annual rainfall of 150 inches at the lower end of the line, and are subject to periodical earthquakes. In 1915 abandonment of the line, seriously damaged by slips, was considered At Lumding the elevation is 456 ft, but the railway rises in two places to about 1850 ft, with descents to three rivers. The most important of these is the Dyong (62 m. from Lumding) crossed by a viaduct 109 ft high, and here there is a loop round a spur of the Barail Range at Haflong The loop is 9 m long, in which the railway rises 451 ft, but the ends are only half a mile apart Jatinga station (73 m) is on the watershed of the Surma and Brahmaputra basins The maximum gradient is 1 in 37, and some curves have a radius of 573 ft There are eleven tunnels with a total length of 5000 ft

Haflong, headquarters of the N Cachar Hills is 3½ m from **Lower Haflong** station, the elevation is 2300 ft there is an hotel, golf course, and lake

The Tea Industry

China tea seed was introduced into India about 1848 by Mr Fortune, who was sent to China by the Hon E I Coy to collect seeds and plants In 1823 indigenous plants had been discovered by Robert Bruce, Commander of a gunboat in the 1824 Burma War, and an agent of the last Ahom King The tea was first sold in Mincing Lane on 10th January 1839

Assam is the principal centre of the Indian tea industry, with 1100 gardens. Most of the immigrants into Assam, chiefly from Bihar and the Central Provinces, do not come

under the Labour Act Time-expired tea-garden coolies can obtain Government land for colonisation on favourable terms.

An introduction to some planter from friends or from London or Calcutta agents of a tea-estate will ensure a hospitable reception There is a Research centre at Tocklai (1900).

The tea-planters of Assam did a great work during the evacuation from Burma in 1942 (see *Forgotten Frontier*, by Geoffrey Tyson)

ROUTE 25.

CALCUTTA to MADRAS by **Balasore, Cuttack, Bhubaneswar** (visit to **Udayagiri Caves**), PURI, (and the **Black Pagoda**), **Ganjam, Vizianagram, Waltair** for **Vizagapatam, Bezwada**, and **Nellore**.

Distance 1032 m ; time occupied by mail train, 36 hrs

The Calcutta-Madras mail train travels over the **Bengal-Nagpur Railway** from **Howrah** to **Waltair**, and the Madras and S Mahratta Railway, N E section, from **Waltair** to **Madras**

Howrah —Calcutta (see p 102)

5 m **Santragachi** junction for the Shalimar wagon ferry to the Docks

20 m **Ulubaria** (see p 131), the former landing-place for Midnapur (by palanquin)

26 m the **Damodar** River, crossed by a bridge built in 1900

35 m **Kola Ghat** (R) Here the railway crosses the Rupnarain River, a large tidal river flowing into the Hooghly, near its junction with which are the famous James and Mary Sands (p 131) The bridge over this river is 2632 ft in length with 300 ft spans

72 m **Kharagpur** (R., D.B.) is the junction for the line to Nagpur (see Route 7) The main workshops of the Bengal-Nagpur Railway are here The workers in the railway settlement, which is self-contained and carefully laid out, speak 14 languages There are High Schools, Girls' School, and

Technical Schools. The settlement is managed by a Committee of Europeans and Indians.

From Kharagpur there is also a branch, crossing the Cossye River by a bridge 1736 ft long (1900), to (8 m) **Midnapore** (D B ¼ m), an old station of the E I. Company, the revenue having been assigned by the Nawab of Bengal in 1760 This branch (opened 1903) runs N W through Bankura to (105 m) Adra junction between Sini and Asansol (p 65) The road crosses by the Burge Bridge (1938).

A cyclone and floods in 1942 caused a famine next year

Ghatal.—Important trade centre During the rains there is a daily (Calcutta S N Coy) steamer service from Calcutta, otherwise steamers proceed up to Ramchak, whence the journey is made by boats. Chief industries are the weaving of cotton and tussore silk cloths, the manufacture of bell-metal utensils, and of earthen pots.

Contai.—36 m by road from Contai Road Railway Station (m 94) The S E of the district is a maritime tract lying along the Bay of Bengal, submerged by a tidal wave in November 1942

Kaukhali, or Cowcolly—A village on the sea-coast 3 m S.W. of Khajuri A lighthouse was built here in 1810

The District is full of Sal jungle, in which black bear and leopards are to be found In winter snipe and duck can be shot

The line S of Khargpur was opened in 1899, as part of the East Coast Route.

118 m the Subarnarekha River is crossed by a bridge 1908 ft long (1899), no road.

133 m **Rupsa** Jn.; N.G Ry to Baripada and Talband (71 m.) in Mayurbhanj State, where iron ore is obtained The Mayurbhanj Museum contains neolithic implements and copper plate grants Another (1929) is at Khiching, the old capital, with temples

138 m. a flood-opening 1785 ft. long.

144 m **Balasore** (R, D B ½ m, furnished) Chandipur (R H. of Proof Dept, available for visitors), 8 m, on the sea-coast is an ordnance station for testing shells and guns Sea fish are sent to the Calcutta market Mahsir may be caught in the Burabalang river The Orissa Trunk Road runs through the place, and there is a road to Mayurbhanj and Nilgiri (unbridged)

The place, of which the correct name is Baleswar, was once of great commercial importance, and the Dutch, Danes, English, and French had factories here Pipli (Philip's City), in the District, is supposed to be the first spot at which, in 1634, the English E I Company established a factory in Bengal It was a Portuguese stronghold and slave market The Balasore factory was founded in 1642, in accordance with a grant issued by the Delhi Emperor There are two old Dutch tombs, dated 1683, built like three-sided pyramids, about 20 ft high, in a small enclosure near the town The Dutch and Danish settlements were ceded by treaty in 1846 The Danish Settlement was in an area called Dinadardinga, on the Burabalang River, and a French loge on the river is leased by the British

There is a temple at **Remuna** (6 m.), where pilgrims to Puri congregate. The god (Khirchora Gopinath), an incarnation of Krishna, is supposed to have settled here 800 years ago, but the temple is only about 100 years old, and the sculpture is crude

183 m **Bhadrak** (D B). From here the port Chandbali (D B) lies 31 m S E. by road, regular steamer service to and from Calcutta (Outram Ghat).

198 m the Baitarni River is crossed by a bridge 2400 ft long (1899), no road The river in Hindu ideas is the first gate to Jagannath, and an offshoot of the Ganges

210 m **Jajpur** Road (D B K) for Jajpur, 18 m E (D B) The road crosses the Burah River (unbridged), motor bus service

Jajpur,[1] capital of Orissa from about 500-950 A D, was founded by Jajati Kesari (474-526), who celebrated the horse sacrifice at the Dasaswamedh Ghat on the Baitarni river Here is the Navi Gaya (navel of a monster, Gaya Sur), where Hindu pilgrims offer rice cakes in expiation of the sins of their ancestors The chief object is a pillar 32 ft high, square, and composed of large plain blocks of stone The shaft and capital are 26 ft. 7 in. high, and appear to be a monolith The capital is carved to imitate lotus blossoms, and adorned below with lions' heads, from whose mouths depend strings of roses or beads The capital once was crowned with a figure of the Garuda, or eagle-vehicle of Vishnu, said to have been hurled down by a Hindu renegade, **Kala Pahad**, in 1568; it is now in the temple of Narsingh, 1 m. S. of the temple of Jagannath The finest temple is that of Trilochan, the Three-Eyed; others are dedicated to Akhandaleswar and Agneswar Jajpur is also called Biraja Khetra, from the temple of Biraja (Shiva's wife) On the Binjharpur Road is a well-built ancient bridge In the compound of the Subdivisional Magistrate are three monolithic statues of Indrani on her elephant, Varahi with the boar, and Chamundi (p 115) represented as the Goddess of Famine, and seven other statues, each 6 ft high, have been placed in a temple. Near the P W D Bungalow is also the mosque of Nawab Abu Nasir Khan, built in 1681 A D

There is a bungalow at Vyasorovar (2 m from Jajpur Road Station) In a tank here King Duryodhan hid himself after defeat in the Kurukshetra battle From this place there is a metalled road (not bridged throughout) *vid* Keonjhar, Chaibasa (Singhbhum), Chakradharpur and Ranchi for motoring to Patna, the capital of the Province of Bihar (p 61)

The Nalatigiri hills contain Buddhistic caves and inscriptions in Pali, and magnificent images of Buddha, dating 700-800 A.D Motor-bus from Jagatpur jn to Mahanga, 4 m from the hill P W D R.H on the Gobeeri River at the foot. A P.W.D. Bungalow is available at 2 m from the hills

217 m near **Jenapur** is the Brahmani River, with a bridge 4640 ft long (1899)

250 m. the Berupa River is crossed (bridge 1728 ft long).

From 252 m. **Jagatpur** junction a branch runs W. to Talcher (66 m.) and Angul is 14 m W again by

[1] There is an excellent little handbook of Cuttack, Jajpur, Bhubaneswar, Udayagiri, Puri, and Konarak, by Mr Brown, formerly Judge of Cuttack.

motor-bus from Meramendali, the previous station. Part of Angul is now in the Orissa Province, another part, Khondmals, in Ganjam.

252 m. the Mahanadi River has a bridge 6912 ft long

254 m **Cuttack** * (R., D B K) is situated at the apex of the delta of the Mahanadi river, which rises in the Raipur district of the Central Provinces, and has a length of 529 m It rushes down upon the delta through the narrow gorge of Naraj, 7 m W of the town of Cuttack, and, dividing into two streams, encircles the city on the N and E, and on the S by its branch, called the Khatjuri The river during the rains pours down a prodigious flood, and an important stone embankment has been erected on the spit of land on which the city stands

Cuttack is the headquarters of the **Orissa** Government[1] The Secretariat and Legislative Council Chamber are at Chandawar Judges from Patna come on Circuit. The Governor is H.E Kailas Nath Kathe, appointed 1947 It was founded (p 499) by Nrup (920-935 A D) of the Kesari, or Lion, dynasty. Its position as the key of the Orissa hill territory and the centre of the network of the Orissa canals gives it both military and commercial importance. It is famed for its filigree work in gold and silver

There are two Clubs, one European and one Indian. The former is within the Fort enclosure; also a Circuit House and Museum The Ravenshaw College with imposing new buildings is affiliated to Patna University: there are also a Medical School and the Orissa School of Engineering. The Talcher coalfield at Ningundi is served by a ry. from Jagatpur jn, 2 m N of Cuttack

The **Fort** (1 m N W), called Fort Barabati (12 battys = 240 bighas), is in ruins, and all that remains of it now is a fine gateway It was built either by Ananga Bhim Deb (1189-1223) or Mukund Deb (1560-1568), last of the Ganga dynasty. The fort was taken by the British in 1803 from the Bhonsle Raja of Nagpur In the public gardens on the Taldanda Canal are a carved arch and other stones

Near Cuttack are important weirs for regulating the flow of the rivers Two of these, the Birupa and Mahanadi, may be seen in quitting the place A road a little to the N of the Taldanda Canal leads to the Jobra Ghat, where are the Great P W D workshops and the Mahanadi Weir, which is 6400 ft long and 12½ ft high It was begun in 1863 and completed in 1869-70 The Birupa River leaves the Mahanadi on its right bank, and the weir there is 1980 ft long and 9 ft high Of the four canals which form the Orissa Irrigation System, two take off from the Birupa Weir, and one with its branch from the Mahanadi Weir

Kendrapara (D B.), 38 m. E of Cuttack, is connected by road 32 m. to Jagatpur Ry. station (motor-bus (S)), and by motor-launch service on the canal to Cuttack. A place of pilgrimage for Hindus where the idol Baldeb Jee, an incarnation of Vishnu, who killed the monster Kendra, is much revered. It is visited by up-country pilgrims, being known as *Tulasi Khetra* There are four D Bs on the way.

[1] See Sir W. W Hunter's *Orissa* (1872).

Banki is situated at the outskirts of some of the Feudatory States at a distance of 28 m. to the W. of Cuttack. Two D.Bs. are on the way and a P.W.D. Bungalow is at Banki itself. It is an important centre of the Co-operative Credit movement in the Province. There is a temple of Charchi Kai, an incarnation of Durga, wife of Shiva. It is possible to motor from Cuttack to Banki at most seasons of the year but the Khatjuri River has to be crossed.

256 m. the Khatjuri River is crossed (bridge 2890 ft. long).

258 m. the Kuakhi River bridge is 3212 ft. long (1900).

272 m. from Calcutta is **Bhubaneswar.** There is a Dt. Bd. Bungalow 2 m. from the station. A.R.H. (supplies should be taken) is at Khandagiri, 6 m. to the N.W. of the station—permission to occupy it should be obtained from the Collector, Puri, or Subdivisional Officer, Khurda. The Chairman, Dt. Bd., Puri, will accord leave to occupy a room in the Dt. Bd. Inspection Bungalow at Bhubaneswar if this is desired. The best plan is to proceed from Cuttack by car to the Asoka rock at Dhauli (14 m., p. 501) near the Orissa Trunk Road S. of Chandka and then to the Khandagiri R.H., spend at least a day in examining the 63 caves there, and to proceed on the second morning to Bhubaneswar to visit the temples there. It takes 3 to 4 hrs. to walk round all the temples in and about Bhubaneswar, leaving time to drive to Puri in the evening (total distance 62 m., ferry at Sardepur), or back to Cuttack.

The *Udayagiri* (Sunrise) *Hill*[1] is 110 ft. high, and the caves are at various levels. The first reached is the Swargapuri Cave, from which a path to the right (E.) leads round to the Rani ka Naur and Ganesh Gumpha caves, and winds upward and backwards to below the Hathi Gumpha, where it is joined by the path which runs up steeply to the left from the Swargapuri Cave past the Jaya Vijaya and Vaikuntha caves.

The *Swargapuri* has carvings on pilasters near the door, along the top of which runs a line of well-sculptured foliage with an elephant issuing from trees at the end of it.

The *Rani ka Naur*, or Queen's Palace (traditionally wife of Lalit Indru Kesari), faces E., and consists of two rows of cells, one above the other, shaded by pillared verandas, supporting the rock, with a courtyard, 49 ft. by 43 ft., cut out of the hillside, much has fallen.

The upper storey, which stands back, has eight entrances with sloping jambs, as at Barabar. At the N. end are two dwarpals, representing men in armour, with buskins and greaves, cut out of the solid rock in alto-relievo, these are probably figures of the Yavana warriors who conquered Orissa. At either end is a rock lion. The back wall of the veranda has an extensive series of tableaux, difficult to make out. First on the left are men carrying fruit, a group of elephants, and soldiers armed with swords—this is probably a scene from Ceylon. Then comes a scene, repeated at the Ganesh Gumpha, of a combat

[1] See pp. 55-94 of *The Cave Temples of India*, and Fergusson's *Indian Architecture*, 2, 9-18.

over a woman—and then one of the winged deer presenting itself to the King. The last scene which can be made out represents a love episode.

The lower storey also has eight low entrances from a colonnaded veranda 44 ft long, having a raised seat, or berm, along its whole inner line. It opened S. into an oblong chamber and N. into three rooms. Here also there is an extensive frieze, four fragments admit of description. The first represents a house, and a female figure looks out of each of the three doors, and one from the balcony, which is protected by a Buddhist rail. A similar rail runs in front of the lower storey, with a large tree by its side In the second fragment a saint or priest holds a piece of cloth in his left hand and extends the right as in the act of blessing; one servant holds an umbrella, and another carries a sword Next a devotee on his knees, and beyond two kneeling women bring offerings, one dusting the feet of a boy, who has one hand on her head. In the third fragment is a saddle-horse with three attendants, and the holy man with an umbrella held over him, and two attendants with swords In the fourth fragment there is a group of six women, three carrying pitchers on their heads, and one kneeling and offering her pitcher to a figure, which is lost. On the right wing are scenes of a man and woman making offerings, and of a woman dancing to the accompaniment of four musicians.

The *Ganesh Gumpha* is almost due N of the Rani ka Naur Cave, and much higher in the hill It has only one storey, and consists of two compartments with a veranda in front There are three pillars in the front of the veranda, square and massive, and two others have fallen. The pillars have brackets, with female figures carved on them. The flight of steps leading to the veranda has a crouching elephant on either side, each holding a lotus in his trunk. The veranda wall is ornamented with a series of eight tableaux in high relief. This frieze and that in the Rani ka Naur Cave represent the same story, but in this cave the figures are more classical and better drawn The scenes include an escape on elephant back, dismounting from the elephant, and resting in the forest. The Buddhist trisula (trident) and shield are carved on this cave

The *Jaya Vijaya Cave*, a double-storeyed one, has a frieze with three compartments, the base being formed of a line of Buddhist rails In the central compartment is a Bo-tree (p. 57). Beside the tree are two male figures, that on the left with folded hands, and that on the right holding a bit of cloth tied to the tree and a small branch Near the men are two females bringing trays of offerings. The semi-circular bands of scroll-work over the doorways are different, and beyond them are two turbaned figures carrying trays of offerings

The *Vaikuntha* is a small two-storeyed cave, with the upper storey set back and a frieze of men and animals across the front. It was probably the prototype of the Rani ka Naur and Ganesh Gumpha.

75 yds. to the N W is the *Hathi Gumpha*, or "Elephant Cave," an extensive natural cave, improved by King Kharaveli of Kalinga (168-153 B.C.). It is perfectly plain, but has an inscription above it of 117 lines (translated by Prinsep), describing the King's career. To the left a boulder has been hollowed out into a cell 5 ft. square.

N of the "Elephant Cave" is the Pavana Gumpha, or "Cave of Purification" About 75 ft. to

the S.W. of the Pavana Gumpha is the Sarpa Gumpha, or "Serpent Cave," having on the top of the entrance a rude carving of the hood of a three-headed cobra. Under this is the door, through which a man can just crawl; the interior is a cube of 4 ft. Beside the door is an inscription translated by James Prinsep.

50 ft. to the N is the very interesting *Bagh Gumpha*, or "Tiger Cave," cut externally into the shape of the upper part of a tiger's head, with the jaws at full gape The eyes and nose of the monster are still well marked, but the teeth are now imperfectly discernible The head at top, where it joins the hill, is 8 ft 8 in broad The gape is 9 ft. wide, and the entrance to the cell occupies the place of the gullet To the right of the entrance is an inscription in the Asoka character. At the beginning of the inscription is a Buddhist monogram, and at the end a Swastika cross

The Khandagiri Hill, close by, is 133 ft high and faces E It is thickly covered with trees The path which leads to the top is steep, and at the height of about 50 ft. divides into two, one branch leading to the left, and to a range of Jain caves cut in the E face of the hill (see below)

The path on the right leads to the *Ananta* Cave, which is a narrow Buddhist excavation, with four doorways and a veranda with pillars and pilasters with decorated sides Instead of a capital, these have a projecting bracket, shaped like a woman. The architrave is heavy, and over it is a parapet supported on corbels. In the centre of the back wall of the cave is a Buddha in bas-relief. The frieze is in five compartments, and represents figures running with trays of offerings, athletes fighting with bulls and lions, and two lines of geese running with spread wings, each with a flower in its bill. In the semi-circular space under one of the arches is a nude female standing in a lotus-bush, and holding a lotus-stalk in either hand. Two elephants are throwing water over her with their trunks This is a representation of Lakshmi, the first of the Hindu Pantheon to be revered by the Buddhists In the other tympanum is a scene representing the worship of a Bo-tree

The remaining caves are Jain, perhaps converted from Buddhist The left path leads to a modern gallery, and to the S. to a range of three openings There is here a Sanskrit inscription of the 12th century recording that the cave belonged to Acharya Kalachandra and his pupil Vellachandra Next comes a range of caves facing the E, divided into two compartments by a partition in the middle. On the back wall is a row of seated Dhyani Buddhas and some new images of Jaina Deva At the E end is an altar of masonry, on which are ranged a number of Jain images. The second compartment is very similar. On the back wall is a row of Dhyani Buddhas 1 ft. high, and below, females seated on stools, some four-handed, others eight-handed, with one leg crossed and the other hanging. Under all are lions *couchant*.

From this to the top of the hill is a stiff climb, and the steps in one place are very steep. On the summit of the hill is a plateau and an 18th-century temple to Parasnath. From it is a magnificent panoramic view 15 m. all round The groves of mango and jack trees are most beautiful In front of the temple is a fine terrace, 50 ft. sq., with a raised masonry seat all round. To the S.W. of the temple is a smooth terrace of 150 ft diameter, gently sloping to the W., called the Deva Sabha. In the centre is a small

square pillar, with a bas-relief of Buddha on each side, and round it four circles of chaityas. Three small boulders, set in a triangle and covered by a dolmen of sandstone, stand in the inner circle E. of the Deva Sabha, at 100 yds, is a tank cut in the solid rock, called the Akasha Ganga, or "Heavenly Ganges." Immediately below the tank is a cave where the remains of Rajah Lelat Indra Kesari (617-657) are said to rest

Bhubaneswar.—The first mention of Bhubaneswar, in the Records of the Temple of Jagannath, dates from the reign of Yayati, 474-526 A D, the first of the Kesaris, or Lion dynasty of Orissa He expelled the Yavanas, thought by Stirling and Hunter to be the Buddhists who ruled Orissa for 150 years after a successful invasion about 300 A D His successors reigned in Bhubaneswar until Nripati Kesari, in 920-35 A D, founded Cuttack and made it his capital

7000 shrines once encircled the sacred lake, now 500 remain in decay, exhibiting every phase of Orissan art Two styles of architecture run side by side The first is represented by the temples of Parashuramesvara and Muktesvara, the second by the Great Lingaraj Temple They are not antagonistic but sister styles, and seem to have had different origins

On a short visit the Great, Raj Rani, Mukhtesvara, and Parashuramesvara temples should be seen

"The Great Temple[1] is," says Fergusson, "perhaps the finest example of a purely Hindu temple in India." None but Hindus may enter the enclosure, the high walls of which are 7 ft. thick and of large cut stones without mortar. From the top, however, of a platform outside the N. wall a view of the interior may be obtained. Besides the Great Temples and the halls of approach to it there are also many smaller temples in the enclosure, of which a plain one, 20 ft high, is the oldest, at the N E. corner is a pavilion, perhaps built for a music hall, but now containing an image of Parvati.

The Great Temple was built by Lelat Indra Kesari (617-57), and consisted originally of only a vimana and porch, the Nath and Bhog mandirs (below) (added between 1090 and 1104 The presiding deity is Tribhuvanesvara, "Lord of the Three Worlds," generally called Bhubaneswar He is represented in the sanctuary by a block of granite 8 ft in diameter, and rising 9 ft above the floor, which is bathed daily with water, milk, and *bhang* There are three differently shaded portions, representing respectively Brahma, Vishnu, and Maheswar (Siva) There are twenty-two *dhupas*, or ceremonies, daily, consisting in washing the teeth of the divinity, moving a lamp in front, dressing, feeding, etc

"The Great Tower can be seen from outside the wall It is 180 ft. high, and, though not so large, is decidedly finer in design than that at Tanjore. Every inch of the surface is covered with carving of the most elaborate kind; not only the divisions of the courses, the roll mouldings on the angles, or the breaks on the face of the tower but every individual stone in the tower has a pattern carved upon it" In the vertical sections seen from over the wall, "the sculpture is of a very high order and great beauty of design" The top of the spire is flat, and from

[1] *Indian Architecture*, 2, 99, where a plan and illustration of the Great Temple will be found.

the centre rises a cylindrical neck, supporting a ribbed dome over which is placed the Kalasha or "pinnacle" Twelve lions seated (Sardulas) support the dome, and over all is a broken trident. The shrine itself is called the Bara Dewal, and the original hall of approach to it, the Jagmohan In front of the Jagmohan is the Bhog Mandir, or "Hall of Offerings," and E of that the Nath Mandir, or "Dancing Hall"

Outside the enclosure are many small subterraneous temples. The jungle to the S. of the Great Tower, to the extent of 20 acres, is said to be the site of Lelat Indra Kesari's Palace, and exhibits everywhere the remains of foundations and pavements

N. of the temple is the tank called *Vindusagar*, "Ocean Drop," which is said to be filled with water from every sacred stream and tank in India and possesses in consequence, to a superlative degree, the power to wash away sin In the centre is a Jal Mandir, or "Water Pavilion," consisting of several shrines Here the god is brought to bathe one day in the year In front of the central ghat of this tank there is a magnificent temple, with a porch, a more modern dancing-hall, and Bhog Mandir. All but the Bhog Mandir are lined with brick-red sandstone, elaborately sculptured The temple is sacred to *Vasudev*, or Krishna, and *Ananta*, or Balaram, and no pilgrim is allowed to perform any religious ceremony in the town or to visit Bhubaneswar without paying for permission here. Along the E side of the tank will be noticed several temples of the same shape as the Great Temple

¼ m ENE of the Ananta Temple is one, about 40 ft high, of *Kotitirthesvara*, "The lord of ten millions of sacred pools." It is evidently built of stones from some other edifice

½ m. E. of this is the *Temple of Brahmesvara*, on a high terraced mound. It is most sumptuously carved, inside as well as out, and was erected at the end of the 9th century A D Close to its terrace on the W side is a tank called Brahma Kunda N.E. is an old ruined temple of basalt, to *Bhaskaresvara*, "Sun-god," and said to belong to the close of the 5th or the beginning of the 6th century

At the N E corner of the Great Temple is a very handsome tank surrounded by a row of 108 small temples, and ¼ m E. of this, beyond the Muktesvara and Parashuramesvara temples, is the **Temple of Raj Rani.** Fergusson (*Ind Arch*, 2, 103) says of it "It is one of the gems of Orissan Art" It faces the E, and has a porch in front, both of dressed brick-red sandstone without mortar The niches are filled with statues 3 ft. high, executed with great vigour and elegance One pillar has three kneeling elephants and lions, with a Nagni or female Naga with her seven-headed snake hood. Over the doorways are represented the Navagraha, or "nine planets."

About 300 yds to the W of the Raj Rani is a grove of mango-trees, called *Siddharanya*, "Grove of the perfect beings." Here many temples were built, of which more than twenty remain entire Of these the most remarkable are Muktesvara, Kedaresvara, Siddhesvara, and Parashuramesvara

Muktesvara is the handsomest, though the smallest It is 35 ft high, and the porch 25 ft high The floral bands are better executed than in most of the temples, the bas-reliefs are sharp and impressive, the statuettes vigorous and full of action, with drapery well disposed; and the disposition of the whole is elegant and most effective. Among the subjects are a lady mounted on a rearing

elephant and attacking an armed giant; a figure of Annapurna presenting alms to Siva; females, half-serpents, canopied under five or seven-headed cobras, lions mounted on elephants or fighting with lions; damsels dancing or playing on the *mridang*; an emaciated hermit giving lessons The scroll work, bosses, and friezes are worthy of note. The chamber of the temple is 7 ft. sq., but outside measures 18 ft In front of the porch is a Torana 15 ft. high It is supported on two columns of elaborate workmanship, unlike anything of the kind at Bhubaneswar Over it are two reclining female figures. It is said that it is used for swinging in the Dol Festival

Kedaresvara.—Close by a tank behind this temple is the Kedaresvara Temple, and near it, against the outer wall of a small room, is a figure of Hanuman, the monkey-god, 8 ft high, and one of Durga standing on a lion Her statue is of chlorite (a hard, light red stone), and has the finest female head to be seen in Bhubaneswar The Kedaresvara Temple is 41 ft high, and has an almost circular ground plan; it is probably older than the Great Temple, and possibly dates from the middle of the 6th century

N.W. of Muktesvara is Siddesvara, which is very ancient, and was once the most sacred spot on this side of Bhubaneswar. It is 47 ft high, and has a well-proportioned porch.

The **Parashuramesvara**, 200 yds to the W. of the *Muktesvara*, is considered by Fergusson (*Ind. Arch.*, 2, 97) the oldest temple at Bhubaneswar The ground plan is a square, the porch is oblong and covered with bas-reliefs representing processions of horses and elephants in the upper linear bands under the cornice, and scenes from the life of Rama in the lower. The roof is a sloping terrace, in the middle of which is a clerestory with a sloping roof, flat in the middle. As the roof stones project beyond the openings, neither direct rays of sun nor rain can penetrate.

The famous **Dhauli** or Aswatama rock, on which is inscribed the best-preserved set of edicts of King Asoka, lies between 4 m and 5 m S.W of Bhubaneswar. The rock is an isolated one on the level of the plain in front of a low ridge, the face inscribed is 15 ft by 10 ft, and above it are the remains of an elephant The clearness of the 13 inscriptions (translated by James Prinsep in 1838), exposed to the sun and storms of twenty-two centuries, is wonderful.

283 m. **Khurda Road**, branch line to (27 m.) **Puri** The great temple of Jagannath is seen soaring skywards long before Puri is reached

310 m from Calcutta **PURI,*** or Jagannathpur, alt 18 ft The railway station is 1½ m. to the N. of the town, and the Civil Station runs along the seashore. It is the summer headquarters of the Orissa Government. Steamers occasionally call at Puri, but there is no shelter for them and no landing-place There are three hotels; the B.N. Railway Hotel can be recommended. The *Church* is about 80 yds. from the Collector's office Excellent bathing can be had Mr B. N. Roy's museum of Orissan treasures has been moved (1939) to the Ashutosh Museum, Calcutta

The town of Puri is about 1½ m. in breadth from E to W., and 3½ m long from N. to S. It is of great antiquity, and was probably the Dantpura where the sacred relic of Buddha's tooth was preserved

until it was finally transferred to Ceylon The population during the great festivals is increased by 100,000 pilgrims. The town covers an area of 1871 acres, including the *Kshetra*,[1] or "sacred precincts." It is a city of lodging-houses, and the streets are narrow, except the *Baradand*, or road for the Car of Jagannath, when he goes from his temple to his country-house in June or July This road runs through the centre of the town N and S, and is in places half a furlong wide

The **Temple**, or Sri Mandir, is in the centre of the town and stands upon rising ground known as Nilgiri or "the Blue Hill" The endowments provide a total annual income of Rs 100,000, and the offerings of pilgrims amount to Rs 75,000 a-year Richer pilgrims give offerings of gold, silver and jewels When dying Maharaja Ranjit Singh of the Punjab bequeathed the Koh-i-Nur to Jagannath, but his successor did not give effect to his bequest There are more than 6000 male adults as priests, warders of the temple, and pilgrim guides, and, including the monastic establishments and the guides who roam through India to escort pilgrims, there are probably not less than 20,000 men, women, and children dependent on Jagannath. The immediate attendants on the god are divided into thirty-six orders and ninety-seven classes At the head is the Raja of Khurda, whose ancestor resigned in 1816, but who in ecclesiastical matters represents the royal house of Orissa There are distinct sets of servants to put the god to bed, to dress and bathe him, and a numerous band of nautch girls who sing before him.

The title Jagannath (Juggurnath) (Sanskrit = "Lord of the Universe") is really a name of Krishna, worshipped as Vishnu; the immense popularity of the shrine is due to the doctrine preached that before the god all castes are equal There are three images in the temple, representing Jagannath himself, his brother Balbhadra and his sister Subhadra According to Babu Brij Kishore Ghose's *History of Puri*, the images are "bulky hideous wooden busts, fashioned in a curious resemblance of the human head, resting on a sort of pedestal They are painted white, black and yellow respectively, their faces are exceedingly large and their bodies are decorated with a dress of different coloured cloth." Jagannath and Balbhadra have "arms projecting horizontally forward from the ears," but the sister is "entirely devoid of even that approximation to the human form" A large diamond glitters on the head of Jagannath Quaint representations of the images in a wooden shrine may be bought in the bazar *Bhog*, or *Prasad* is offered several times a day and afterwards sold to the pilgrims.

The three images are bathed at the Snam Jatra (June), and annually drawn in procession at the *Rathjatra*, which commemorates the journey of Sri Krishna from Gokul to Mathura (p 249). The car (*rath*) of Jagannath is 45 ft high and 35 ft. square, and is supported on sixteen wheels of 7 ft diameter and prancing horses in front, those of the brother and sister are smaller.[1] Precautions are taken to prevent accidents Votaries have been known to

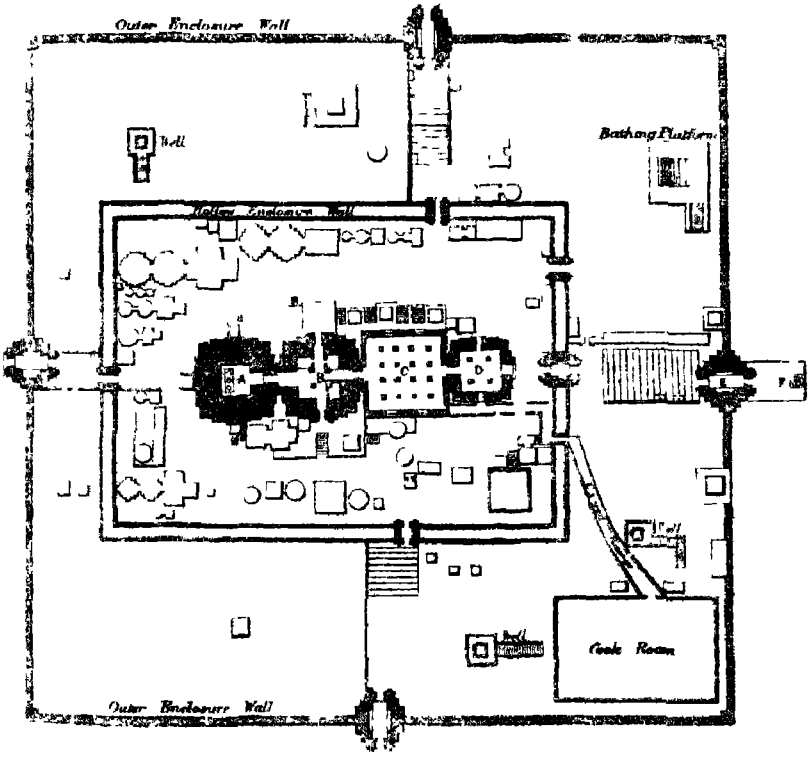
[1] The whole country round is divided into kshetras, the Parvati round Jajpur, the Hara round Kanarak, the Padma (or lotus) round Bhubaneswar, and the Purushottama round Puri. See the very interesting account of *Orissa* in the *Imperial Gazetteer*

[1] The Tooth Festival of Buddha in Japan and Ceylon is also celebrated with three cars Hence the theory that the Puri images were originally Buddhist symbols diverted to Brahmanical worship.

throw themselves beneath the wheels; but the number has been greatly exaggerated, although mentioned by many travellers. A spread of cholera used to follow the dispersion of the pilgrims from Puri. Much has been done to improve the sanitation and water-supply.

The sacred enclosure is nearly a square, 652 ft. long and 630 ft. broad, within a stone wall about 20 ft high, with a gateway in the centre of each side. The door stands open, but it is not possible to see the temples, of which, besides the Great Pagoda, there are more than a hundred, thirteen of them being sacred to Siva and one to the Sun. The tower and temple frontage can be comfortably viewed from the roof of a lodging-house on the opposite side of the street—fee to servants of the house. The Mahant of Emar Math also gives facilities from the Raghunandan Library roof.

In front of the E. gate an exquisite *Pillar* (F),[1] brought from the Black Pagoda at Kanarak, stands on a platform of rough stones, and, reckoning to the top of the seated figure of the Garuda, or "eagle," which surmounts it, is 35 ft. high.



Scale 200 ft to the Inch

Plan of Temple of Jagannath (Fergusson, *Ind. Arch.*, 2, 108.)

[1] These letters refer to corresponding letters on the plan

This gate (E) is known as the Lion Gate from two large lions of the conventional form, with one paw raised, which stand one at either side of the entrance. Within is a second enclosure surrounded by a double wall, having an interval of 11 ft. between the walls, and within this again is the temple proper. The "Hall of Offerings," or *Bhog Mandir* (D), is said to have been built by the Mahrattas in the 18th century. It was part of the Black Pagoda of Kanarak. The *Nat Mandir* (C), or "dancing-hall," also of late date, is a square hall measuring 69 ft. by 67 ft. inside. The walls are plain, with only two figures of dwarpals, called Jaya and Vijaya, and a marble figure of Garuda 2 ft. high.

The *Jagmohan* (B), or "Hall of Audience," where the pilgrims view the images, is 73 ft. sq. and 120 ft. high. The *Baradewal* (A), or "Sanctuary," of the same area, where the images are, is surmounted by a conical "tower" or vimana 192 ft. high, black with time and surmounted by the Wheel and Flag of Vishnu.

The temple was erected first by Yayati Kesari. The building of 1198 was a reconstruction by Raja Anang Bhim Deo, in expiation of the offence of having killed a Brahman. The image of Jagannath is said to have appeared about 318 A.D. It was thoroughly repaired in 1922-23.

There is a street about 45 ft. broad all round the temple enclosure. Turning to the right from the Lion Gate (E) along this road, the visitor comes to the S. gate, where steps lead up to the entrance. The entrance itself is 15 ft. high, and is ornamented with many figures. Above are depicted scenes from the life of Krishna. The supports of the massive roof are of iron.

Rather more than a mile to the N. of the temple, and approached by the broad Baradand, is the famous **Garden House** (Gandicha Mandir), to which the Car of Jagannath is brought and stays for eight days during the festival, dragged by 4200 professionals, who come from the neighbouring districts, and live at Puri gratis. It is broken up yearly, when the timbers are made into sacred relics, and another is made of exactly the same pattern. The images are also treated in this way at intervals of 12 or 24 years.

The Garden House is a temple within a garden enclosed with a wall. The principal gateway has a pointed roof, adorned with conventional lions. The gates to this temple are built upon the Hindu arch system, corbelled slabs supporting the roof, each a little longer than the other, and projecting beyond it. The temple is said to be very old; the interior, which strangers are permitted to enter, except during the Car Festival, is interesting as giving one an idea of the arrangement of the Great Temple. In one of the pillared halls kneels a Garuda on a column facing the shrine. On the side of the temple there is a plain raised seat 4 ft. high and 19 ft. long, made of chlorite, and this is called the Ratna Bedi, the throne on which the images are seated. On the walls are some fine carvings of horsemen, etc. Outside, over the door, are various figures of women 2 ft. high, supporting the roof, also carvings of Brahma with four heads, worshipping Narayan; of Krishna playing to the Gopis, etc.

The legend is that King Indradyumna, King of Malwa, pitched

his camp here when he discovered Puri, and set up an image of Narsingh, afterwards brought to the present temple. Here the Sacred Log from the White Island stranded, and here the Divine Carver made the images of Jagannath, etc., and here Indradyumna performed the horse sacrifice a hundred times over.

1 m. S.W., on the sea-shore S. of the Circuit House, is the *Swarga Dwara*, or "Door of Paradise," where, when all the ceremonies are finished, the pilgrims bathe in the surf and wash away their sins. There is a stump of a pillar 4 ft. high on the right hand, near a small temple. On this pillar offerings are placed, which are eaten by the crows. On the left is the Lahore Math or Monastery. Bathers will be seen, the surf rolling over them. Afterwards they make heaps of sand, resembling a temple, and stick small flag-poles into them.

N.W. of the city are the Chandan Tank and Temple, the Mitiani River, the Markhand Tank and Temple, and a *Bridge* built, according to Raja Rajendra Lal Mitra, in 1038-50. It is 278 ft. long by 38 ft. broad, and has nineteen corbelled arches over the Atara Nala.[1]

20 m. N.E. from Puri is **Konarak** (P.W.D. Inspn. Bungalow; permit from Exec. Eng., S. Divn., Cuttack; supplies to be taken), celebrated for its **Black Pagoda**. From January (perhaps earlier) to June a car can approach within a mile, *viâ* Pipli on the Cuttack road and Gop, 53 m. (3 hrs.). The shore route along the beach takes 10-12 hours by bullock cart by night.

[1] See *Puri and its Environs*, by Robert Dunbar.

Excavations have led to a high appreciation of the temple. Sir John Marshall, ex-D.G. of Archæology, has recorded that there is no monument of Hinduism that is at once so stupendous and so perfectly proportioned as the Black Pagoda. Stirling fixed the date in 1241; it may have been as early as the 9th century A.D. The spire was never completed. When Fergusson visited Konarak in 1837 a portion of the Great Tower was still standing, but had gone by 1869. The pagoda is called *black* in contrast to the white-washed pagoda at Puri, and both were landmarks.

The shrine at the W. end of the temple has been cleared, and it is possible to appreciate the splendid carvings on it, including the wheels and horses, which indicate the fact that the temple was the chariot of the Sun-god. There are many carved figures of green chlorite on the walls, but much of the decoration is licentious; inside is a beautifully carved throne, on which the idol once stood.

The Jagmohan porch has a square base of 90 ft., and is built of red sandstone and laterite. The roof is covered with elaborate carvings free from all objectional features. Fergusson says that there is no roof in India where the same play of light and shade is obtained. "On the floor it is about 40 ft. square, and the walls rise plain to about the same height. Here it begins to bracket inwards, till it contracts to about 20 ft., where it was ceiled with a flat stone roof, supported by wrought-*iron beams* . . . blocks of short lengths, 3 in. or 4 in. square, built together, like bricks,

and then covered with molten metal [*sic*, heated and welded into one long beam]. The employment of these beams here is a mystery. They were not wanted for strength, as the building is still firm after they have fallen, and so expensive a false ceiling was not wanted architecturally to roof so plain a chamber It seems to be only another instance of that profusion of labour which the Hindus loved to lavish on the temples of their gods" (*Ind. Arch*, 2, 107).

The entrance of the Jagmohan is on the E., guarded by stone lions, with strongly-marked manes and one paw lifted up, resting on the backs of elephants, which are smaller in size The height of the entrance, built of chlorite, is 16½ ft., the roof was supported by two rafters of iron and four of stone Near the temple lie several massive iron bars, varying from 7 ft to 36 ft. in length[1] The interior of the hall has now been completely filled up in order to save the outer walls As the E. door is guarded by lions, the N. door is by elephants, and the S by horses trampling down men, who from their tusk-like teeth, crisped hair, knives, and shields, are intended for aborigines. The spirit with which the horses are carved, and also the device on one of the shields of two climbing lizards, should be noticed

To the S of the Jagmohan porch is a large banyan-tree, and a garden with a *math*, or devotee's residence Over the E. entrance used to be a chlorite slab, on which the emblems of the days of the week, with the ascending and descending nodes, were carved. Some English antiquaries attempted to remove this in 1893 for the Museum at Calcutta, but, after dragging it 200 yds., gave up the attempt, though the Indian builders, after excavating the block in the hills and carving it, had carried it 80 m. across swamps and unbridged rivers to Kanarak The carved back portion lies 200 yds. to the E. of the temple, and is 20 ft 2 in long, 4 ft deep, and 4 ft 10 in broad. It is disfigured with oil and red paint The front part is now in the Archæological museum in the temple enclosure

The sea, about 2 m. off, is only visible by climbing onto the *débris* of the temple Black buck are to be found between Puri and Kanarak

327 m. from Calcutta is **Balugan** There the railway line skirts the **Chilka Lake**, some of the scenery along which is of great beauty—to the W are the jungle-clad hills of the Eastern Ghats, while the lake is dotted with islands on which, as on the mainland, game of all kinds abounds, and in the cold season has a surface crowded with wild-fowl. The lake is 45 m long, averages 10 m in width, is separated by a narrow stretch of sand from the sea, and is shallow, the water is brackish, and there is a very slight tide at the Southern end, the sea running into it at Manikpatnam. Trade is carried on in flat-bottomed boats of peculiar structure with lateen sails of bamboo-matting There is a P.W.D Inspection Bungalow at Barkul, on the Western shore of the lake. (Permission for occupation of the house from the Superintending Engineer, Cuttack) This bungalow is connected by a good road, about 3 m. long, with Balugan railway station.

345 m. **Rambha**, picturesquely situated at the S of the Chilka

[1] Other instances of the employment of large masses of iron occur at Dhar (p. 249) and at the Qutb Minar of Delhi (p. 307). These iron beams have probably something to do with the fable that there was once a lodestone in the tower of the temple, which used to draw passing ships on to the shore.

Lake. The large house on the margin of the lake was built by Mr Snodgrass[1] in 1792 — it is now the property of the Raja of Kalikota.

356 m **Ganjam** station for Old Ganjam, situated on the Rushkulhya (bridge 1598 ft long), and formerly chief port and town of the District; in the early part of the nineteenth century it was ravaged by an epidemic of fever and abandoned in consequence The ruined fort, commenced in 1768 by Mr Cotsford, the first Resident in Ganjam, recalls memories of former Residents and Chiefs in Councils established in 1760 for the Northern Circars here, at Masulipatam and Vizagapatam Alexander Mackrabie, the brother in law and private secretary of Sir Philip Francis, who was present as Sheriff of Calcutta at the execution of Maharaja Nuncomar in 1775, died here in the following year, while on a sea voyage for his health The tomb has disappeared.

361 m. **Chatrapur** station, beautifully situated on high ground above the sea, headquarters of the District Magistrate and Collector. D B at railway station, furnished

375 m **Berhampur** (R., D B); now in the Orissa Province, Circuit Court from Patna, headquarters of the District Judge. an old Cantonment, the troops were removed by Lord Kitchener in 1906 Motors can be hired. Chief buildings are the Jubilee Hospital, Town Hall, Kalikot College It is noted for its tussore silk cloths and gold-embroidered turbans **Gopalpur** (hotels), the seaport of the District, is 9 m. by road. A motor-bus service (S) runs from Berhampur to Aska (25 m.), where there is a sugar-factory, and to Russelkonda (50 m.); also to Udayagiri (27 m farther).

Russellkonda (Russell's Hill) is the hdqrs. of the Maliah tracts, inhabited by Khonds, a primitive race which once practised human sacrifice. Between 1837 and 1854 more than 1500 of these "Meriahs" (as the victims were called) were rescued by British officers

Mahendragiri, the highest point of the Eastern Ghats (4923 ft), in the Ganjam District, has on its top five unique structures built of massive stone Three of these are temples of Kunti, dedicated to the god Siva, Yudhistira and Bhima There is also a stone pillar on which are engraved the figure of a tiger, two fish, and an inscription. The Cholas of Tanjore whose crest was the tiger, must have once extended their sway right up to Mahendragiri, and even beyond There is a private bungalow at the summit of the mountain, belonging to the Raja of Mandasa The Government of Orissa propose to lease the hill for a summer camp

437 m. **Naupada** junction, N.G line to (25 m) Parlakimedi and Gunupur (56 m)

466 m **Chicacole Road station** (Srikakulam). Motor-bus service to **Chicacole** (8 m by road; D.B unfurnished) which contains a noble mosque built in 1041 by Sher Muhammad Khan, the first Muhammadan Faujdar of the Chicacole Sirkar. It was formerly a cantonment and celebrated for its muslins. The port of Kalingapatam, a former centre of the Kalinga dynasty, is a pleasant seaside resort.

509 m. **Vizianagram** junction (R.), the headquarters of an ex-

[1] This was the gentleman who extorted a pension from the E I.C. by sweeping a crossing in front of the India House.

1 m. to the W., is the Undavalli Cave-Temple (see below).

In the town are some old shrines with inscriptions from the 7th century downwards. The caves of Bezwada are unimportant. At the **Victoria Jubilee Museum** (1890) there is a colossal figure of Buddha in black granite, which came from the hill to the E. of Bezwada. The river is here crossed by a great dam, or *anicut*, 3715 ft. long and 20 ft. above the bed level (1855). From both ends canals take off and irrigate about 800,000 acres of land.

The telegraph line from Madras to Calcutta is carried across the Kistna river in a single span. The distance from support to support is 5000 ft., and the average height above the river bed is about 400 ft., but in midstream the lowest wire sinks to 66 ft. above the crest of the anicut.

Excursions from Bezwada

(1) In order to reach **Undavalli** village it is necessary to cross the Krishna from Bezwada by the railway or *anicut*, and go 1½ m. up the course of the river above and W. of Sitanagaram. There is a rock-temple of two storeys close to the village. In a recess facing N. is a five-storeyed Brahman excavation discovered (1797) by Colonel Mackenzie. The upper storeys are all set back, so that the façade represents the exterior of a structural building. The lowest storey across the whole front has three rows of seven pillars partially hewn out. The second originally had four compartments, at the back of one of these is a shrine cell with an altar, and in another is a relief of Vishnu and his wives. The façade on the front here has a frieze of geese, and a cell at the left end one of elephants and lions. The third storey contains a hall 53 ft. by 36 ft., with a figure of Vishnu seated on the serpent Ananta, and of Narayana, 17 ft. long, resting on the great snake Shesha. The top storey consists of arched roofs of the shape used in all Dravidian temples. The fifth storey, which was never completed across the whole front, is the lowest of all, to the right of the flight of steps up to the cave. The date of the excavation must be much the same as those of Mahabalipuram (Route 34).

(2) 40 m. by road *viâ* Guntur is **Amaravati**, on the right, or S. bank of the Krishna river, once the capital of the Andhra kingdom. It was an ancient centre of the Buddhist religion, and the site of a great tope;[1] but scarcely anything remains. Portions of it are in the British (main staircase) Calcutta and Madras Museums. The railings date 170 A.D., but the tope, still older, was perhaps 100 ft. high with a base diameter of 172 ft.

A branch railway 50 m. long connects **Bezwada** with **Masulipatam** (Machhli-patnam or "Fish Town", D.B.), principal port of the Krishna District, one of the N. Circars. It was taken by the Bahmani Kings (1476) from an Orissan Raja, and was a principal settlement, under Bantam, of the E.I. Company for trade on the E. coast, under a firman from Golconda. An agency was established here in 1611, after the failure of that at Pulicat, and a factory eleven years later, the Dutch and French also had factories here. There are Dutch tombs dating from 1624. In 1690 a farman of the Delhi Emperor confirmed the English privileges. In 1750 the French took it, and

[1] See Fergusson's *History of Indian Architecture*, vol. i, pp. 80-112, 119-123, and *Tree and Serpent Worship*, and Dr. Burgess's *Amaravati and Jaggayapetta Stupas*, London, 1887.

in 1753 the place was made over by the Nizam to Bussy, but was carried by storm by Colonel Forde on the night of 7th April 1759, 500 French and 2500 sepoys surrendering with 120 guns to only 346 European troops and 1400 sepoys—one of the most brilliant feats ever accomplished by British arms. A Treaty with Salabat Jang, subadar of the Deccan, followed The fort is now dismantled The chintzes of Masulipatam were once famous The C.M.S. has an important centre here, with a college, affiliated to the Madras University.

Immediately S of Bezwada is the Krishna Bridge, 3736 ft. long, 12 spans of 292 ft (1893), carrying both gauges (roadway also)

784 m. **Tenali** junction (R.), a branch (37 m.) passes through here from Repalle on the E to Guntur junction (p. 581).

850 m. **Ongole** (R.).

901 m. **Bitragunta** (R.)

923 m. The bridge over the Penner River is 2524 ft long (1898) to **Nellore** (D.B., alt. 57 ft.) on the right bank There are here Missions of the Roman Catholics, American Baptists, and Hermansburg Lutherans To the N.W. is the hill of Udayagiri, 3079 ft., with a fortress. Good snipe-shooting in the cold weather

946 m. **Gudur** jn. (R.). Centre of the mica mining industry. Branch to (52 m.) Renigunta (p. 531) on the main line from Bombay to Madras (Route 26), and to Katpadi on the Madras-Bangalore line.

1010 m. **Ponneri**. 10 m. N.E. and 25 m. N. of Madras is **Pulicat**, (Palaverkalu), first Dutch Settlement in India. The fort, built in 1609, was named Castel Geldria, and a representation of it is carved on one of the tombs in the old cemetery, and which contains many coats of arms. On the opposite side of a long lake the hamlet of Coromandel is popularly supposed to have given its name to the whole of the E coast The word, however, is probably a corruption of Cholamandalam, "the realm of the Chola kings" English traders were so hampered here by the Dutch that they moved (1626) to Armagaon (40 m. N.) and then to Madras in 1639

1021 m. **Ennur** (Ennore), still a popular week-end resort from Madras, on a large backwater Good boating and bathing.

1032 m. from Calcutta is **Madras** Central Station (Route 33).

ROUTE 26.

BOMBAY to MADRAS by Kalyan Junction, Neral (for Matheran), the Bhor Ghat, Lonavla (for the Caves of Karli and Bhaja), POONA, Dhond (for Ahmadnagar), Sholapur, Hotgi Junction, Gulbarga, Wadi Junction, Raichur, Guntakal Junction, Renigunta Junction (for Tirupati) and Arkonam Junction.

Rail 794 m Mail train about 32 hours in transit.

The Poona-Madras mail of the G.I.P. Ry. leaves Victoria Terminus (Bombay) daily, and follows the same route as the Bombay-Calcutta mail (Route 2) as far as

34 m. from Bombay, **Kalyan** Junction. From Kalyan the Calcutta mail goes N.E. up the Thal Ghat, and the Poona-Madras mail ascends the **Bhor Ghat** The section between Bombay and Poona has been electrified

The country below the Ghats as far S. as N Kanara is known as the Konkan — that above the Ghats from the Godavari (formerly from the Vindhya mountains) to the S. as the Deccan (Sanskr , *dakshina*, " southern ")

The first station on the Poona line, after leaving Kalyan, is

38 m. **Ambarnath**, " Immortal Lord," is a factory town 1 m E. is the Temple of Ambarnath, in a pretty valley It is a specimen of genuine Hindu architecture, *covered with beautiful designs, in* which birds and the heads of the lion of the South are introduced The roof of the hall is supported by four richly-carved columns The pediment of the doorway leading into the vimana (shrine) is ornamented with elephants and lions, and in the centre with figures of Siva A curious belt of beautiful carving runs up each face of the vimana An inscription inside the lintel of the N. door gives the date of the building of the temple as = 860 A.D.

54 m **Neral** junction (R.) For **Matheran** leave the rail here, and ride or " dandi " up 8 m. in 1½ hrs , or take the steam tramway opened 1907 (2 ft. gauge), to Matheran, 13 m Ponies, munchils (palanquins) or rickshaws available, if ordered from Matheran

Matheran, " the wooded head," or " mother forest," is an outlier of the Sahyadri range, varying from 2300 ft. to 2600 ft. above the sea-level, and is an agreeable summer resort. The Granville and the Rugby are the hotels favoured by English visitors The crown of the hill forms a narrow undulating table-land running N. and S., covered with small tree growth, with spurs separated by ravines on all sides, with precipitous slopes everywhere, sometimes 1500 ft high, the spurs terminating abruptly in bluffs called " points " Among the finest of these are Porcupine, Hart, and Monkey Points to the N W , from which Bombay Harbour can be seen, Chauk Point, the S extremity, where the old road of ascent emerges : and several points on the E. from which Khandala and the Ghats are visible. The finest of all is *Panorama Point*, to the N. of the bungalows. The distance is a little over 4 m. The road leads through a thick jungle of beautiful trees, and about ½ m from Panorama Point comes to a *point parallel with Porcupine* Point, where a precipice descends abruptly 1000 ft. At 100 yds from its termination the road goes quite round the brow of the peak, and affords an extremely beautiful panoramic view. To the left are Hart Point and Porcupine Point,

at the N. and N.W. extremities of a promontory shaped like the head of a battle-axe. Between Matheran and Prabal the mountain sinks down abruptly to the plain. From Panorama Point the Bawa Malang Range, 10 m. long, with strange cylindrical or bottle-shaped peaks, is visible some 15 m. to the N.

The extreme W end is known as the "Cathedral Rocks." The huts of Neral village lie directly below, and beyond them is the curving line of the G.I P. Railway Bombay may be seen from this point on a clear day under the evening light

62 m. **Karjat** junction A line runs S (9 m.) to **Khopoli** on the Poona road, but is only used in the dry season The railway to this point was completed in 1856, and to the top of the incline in 1863, but meanwhile construction proceeded from the top onwards, the rails (then much shorter and lighter) being carted by the road (opened 1830), and reached Poona in 1858.

The **Bhor Ghat** begins 1 m from Karjat. The gradient is 1 in 37 The line first rises up the slope of the long spur which ends in the hill called Londgiri, which encloses the N side of the Kampoli Valley, and at the height of 1000 ft passes by a tunnel to another wooded valley on the N., which soon terminates in an extremely fine and beautifully wooded ravine The old Reversing Station, 1350 ft above the sea, is situated on an elevated spur, affording grand views of the ravine, but has been superseded by a realignment completed in December 1928. A cement-lined tunnel, 3000 ft. long and 35 ft. in width, was driven, and a bridge carries the line over the ravine The works were executed by the Tata Construction Company. From the Reversing Station can be seen the curious sheer rock called "the Duke's Nose," and by the people Nāgphudi (the Cobra's Hood).

The hillsides form in the monsoon almost a continuous waterfall, surrounded by vivid green vegetation. The line now winds round to the E. side of the Khopoli Valley, and makes its way round the crest of the tableland to Khandala, which stands at the head of the ravine

The Power Station (1913) of the Tata Hydro-Electric Works is in the Kampoli Valley, at the foot of a fall of some 1740 ft. by which water from three lakes at the top, near Lonauli, descends in mighty steel pipes, lying on the rocks at a steep angle, in successive stages. Here five huge turbines generate a current at 5000 volts, transformed in the station to a pressure of 100,000 volts, which is conveyed by six wires on steel towers to Bombay, a distance of some 43 m. in a direct line.

78 m **Khandala** (P W.D Bungalow, permit from Exec Engr, Poona Division). This beautiful village is a favourite retreat for the inhabitants of Bombay in the summer months It overlooks the great ravine. Above the head of the ravine, to the S, is the hill called the Duke's Nose, with a view over the Konkan The ascent is by the S. shoulder, and is very steep. There is a *Convalescent Home* at Khandala in connection with St George's European Hospital, Bombay.

The *Waterfall* on the right side of the ravine, near its head, is very fine in the rains, the upper of the two falls into which it is divided having a clear leap of 300 ft.

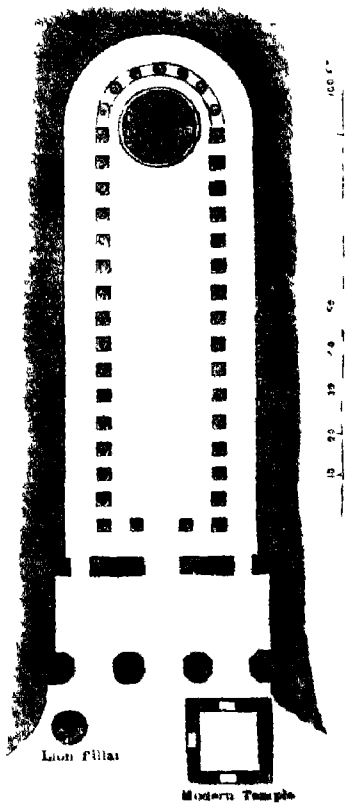
80 m. **Lonavla** (Lonauli) station * (R.) at the top of the Ghat, 74 m. from Bombay by road. Here are the G.I P. Railway Company's School and Church,

and a large railway colony. 2 m. S. is the Valvhan Lake.

The great cave at *Karli* (7½ m.) and the caves of Bhaja (6½ m.) are accessible from Lonauli by car, which can go off the Poona Road at mile 68 S. to the Malavli station, ¾ m. distant from the caves of Bhaja, or N. to the base of the rocky ridge of the Karli cave. An Indian caretaker resides within ¼ m. of the Bhaja cave. The ascent to the Karli cave is nearly 400 ft. by a good path, with a fairly easy gradient; if a pony is required, it must be sent out from Lonauli.

85 m. **Malavli** station (P.W.D. Inspn. Bungalow, permit from Exec. Engr., Poona). The *celebrated Hinayana cave* is on a hill about 4 m. from the station.

The following is an abstract of Fergusson's description of it:[1] "The cave of Karli is certainly the largest, as well as the most complete, chaitya cave in India, and was excavated at a time when the style was in its greatest purity, and is fortunately the best preserved. Its interior dimensions are 124 ft. 3 in. in total length, 81 ft. 3 in. length of nave. Its breadth from wall to wall is 45 ft. 6 in., while the width of the central aisle is 25 ft. 7 in. The height is only 46 ft. from the floor to the apex. The building resembles an early Christian church in its arrangements, while all the dimensions are similar to those of the choir of Norwich Cathedral." The nave is separated from the side aisles by fifteen columns with octagonal shafts on each side, of good design and workmanship. On the abacus which crowns the capital of each of these are two kneeling elephants, and on each elephant are two seated figures, generally a male and female, with their arms over each other's shoulders, but sometimes two female figures in the same attitude. The sculpture of these is very good, and the effect particularly rich and pleasing. Behind the dagoba are seven plain octagonal piers in a curve, making thus thirty-seven pillars altogether, exclusive of the Lion Pillar outside, which is sixteen-sided, and is crowned with four lions with their hinder parts joined. The dagoba is plain and



Cave at Karli

[1] *Rock-cut Temples of India*, p. 27. See also *Indian Architecture*, i. 142 and *Architectural Antiquities of Western India*, p. 4, by H. Cousens (India Society, London, 1926).

very similar to that in No. 10 cave at Ajanta,[1] but here a part of the *wooden* umbrella remains. The wooden ribs of the roof, too, remain nearly entire, proving beyond doubt that the roof is not a copy of a masonry arch, and the framed screen, filling up a portion of the great arch in front, like the centring of the arch of a bridge, remains.

In advance of the front is a second screen, which exists only here and at the great cave at Kanheri,[2] though some may have been formed in front of the oldest chaitya caves at Ajanta.[1] It consists of two plain octagonal columns with pilasters. Over these is a deep plain mass of wall, occupying the place of an entablature, and over this again a superstructure of four dwarf pilars. Except the lower piers, the whole of this was covered with wooden ornaments. The design appears to have consisted of a broad balcony in front of the plain wall, supported by bold wooden brackets from the two piers, and either roofed or having a second balcony above it. No part of the wood, however, exists now, either here or at Kanheri. This was the music gallery or Nakkar Khana, which we still find existing in front of almost all Jain temples. Whether the space between this outer and the inner screen was roofed over or not is extremely difficult to decide. To judge from the mortices at Kanheri, the space there would seem to have had a roof, but here the evidence is by no means so distinct. There are no traces of painting in this cave, but the cave has been inhabited, and the smoke of cooking-fires has blackened the plaster. Its inhabitants were Saivites, and the cave was considered a temple dedicated to Siva, the dagoba performing the part of a gigantic lingam.

[1] P. 70. [2] P. 30.

The outer porch[1] is 52 ft. wide and 15 ft. deep. Originally the fronts of three elephants in each end wall supported a frieze ornamented with a rail pattern, but at both ends this has been cut away to introduce figures. Above was a thick quadrantal moulding, and then a rail with small façades of temples and pairs of figures.

"The age of the cave is probably antecedent to the Christian era, and at the same time it cannot possibly have been excavated more than 200 years before that era. From the Sinhasthamba (lion pillar) on the left of the entrance Colonel Sykes copied an inscription which Mr Prinsep deciphered in vol. 6 of the *Journal of the Asiatic Society*. It merely says 'This lion-pillar is the gift of Ajmitra Ukass, the son of Saha Ravisabhoti', the character, Mr Prinsep thinks, is of the 1st or 2nd century B.C. From its position and import, the inscription appears to be integral, and the column is certainly a part of the original design. I am inclined to think the date, 160 B.C., is at least extremely probable."

The question remains whether the woodwork now existing in this cave is that originally put up or not. "Accustomed as I had long been to the rapid destruction of everything wooden in India, I was half inclined to be angry when the idea first suggested itself to me, but a calmer survey of the matter has convinced me that it is. Certain it is that it is the original design, for we find it repeated in stone in all the niches of the front, and there is no appearance of change or alteration in any part of the roof. Every part of it is the same as is seen so often repeated in stone in other and more modern caves, and it

[1] A modern temple to Ekvira a title of Bhawani, the family goddess of Sivaji obscures the view of the arched doorway

must, therefore, have been put up by the Buddhists before they were expelled; and if we allow that it has existed 800 or 1000 years, which it certainly has, there is not much greater improbability in its having existed near 2000 years, as I believe to be the case. As far as I could ascertain the wood is teak. Though exposed to the atmosphere, it is protected from the rain, and has no strain upon it but its own weight, as it does not support the roof, though it appears to do so; and the rock seems to have defied the industry of the white ants."

The principal viharas at Karli to the right of the entrance to the chaitya are three tiers in height. They are plain halls with cells, but without any internal colonnades, and the upper one alone possesses a veranda. The lower fronts have been swept away by great masses of rock which have rolled from above. To the left of the chaitya are some smaller viharas and cisterns.

The **Caves of Bhaja and Bedsa**[1]—Bhaja is a village ¾ m. S. of Malavli railway station, and Bedsa is 5½ m. to the E. of Bhaja. The caves of Bhaja date from 200 B.C. There are eighteen excavations, of which the Chaitya No. 12 is one of the most interesting in India. It contains a dagoba, but no sculptures, and has its roof supported by twenty-seven sloping pillars. Outside there is a group executed in bas-relief, now much defaced, and marks show that a wooden front was once attached to the great arch. On both sides of the chaitya the hill has been excavated into the usual halls of instruction, with cells. A little way to the S. is a curious collection of fourteen dagobas, five of which are inside and the others outside a cave. On the first of the latter there is an inscription. The last cave to the S., some way beyond the others, is a vihara 16½ ft. by 17¼ ft., decorated with excellent and interesting sculptures, including one of a prince on an elephant and another of a prince in his chariot, and three armed figures.

The caves at Bedsa lie 4 m. S.E. from Kamshet station beyond Malavli, and date a little later than Bhaja. The plan of the chaitya resembles Karli, but is neither of so great extent nor so well executed, and appears more modern. It contains a dagoba, and its roof, which is ribbed and supported by twenty-six octagonal pillars 10 ft. high, seems to have been covered with paintings, which are now indistinct. There are four pillars about 25 ft. high in front, surmounted by a group of horses, bulls, and elephants, with a male and female rider upon them. These groups resemble those found on the Indo-Mithraic coins of the N. The hall of instruction has an apsidal end and a vaulted roof, and is situated close to the left of the chaitya.

96 m. **Vadgaon** (Wargaon) station (P.W.D. Inspn. Bungalow, permit from Exec. Engr., Poona), celebrated for the defeat of a British force under Lieutenant-Colonel Cockburn, on the 12th and 13th of January 1779, and for a Convention (Armistice) with the Mahrattas by General John Carnac of the Bombay Council, who was accompanying the force. The Convention was repudiated by Warren Hastings, who sent Col. Upton to negotiate the Treaty of Purandhar.

116 m. **Kirkee** is only 3¼ m., and better visited, from Poona. It was the scene of a victory over Baji Rao II., the last Peshwa, on the plain S.E. of Government House,

[1] A full account of these places will be found in *Cave Temples of India*, pp. 223, 248.

used as the Artillery parade-ground. On 1st November 1817 the dispositions of the Peshwa had become so threatening that Mount-stuart Elphinstone, then Resident at Poona, determined to remove the troops from the Cantonment of that place to Kirkee On the 5th they took up a good position to the E. of an eminence, on which the village of Kirkee stands, and where the stores and ammunition were parked In the rear of the troops was the River Mula, and from the S and W advanced the masses of the Peshwa's army, amounting to 8000 foot, 18,000 horse, and 14 guns, besides a reserve of 5000 horse and 2000 foot with the Peshwa, at the sacred hill of Parbati (p 523) Elphinstone then directed Colonel Burr to move out to meet them. The Cantonment at Poona and the Residency (p 521) at the Sangam (or meeting of the rivers) had been burnt on the 1st One regiment, commanded by Major Ford, was at Dapuri, N. of Kirkee, and the total strength of the English, even when it joined, was, according to Grant Duff, only 2800 rank and file, of which 800 were Europeans.

Bapu Gokhale (who had accompanied Sir Arthur Wellesley in his campaigns of 1803-1805) commanded the Peshwa's army. Its advance was compared by Grant Duff, an eyewitness, to the rushing tide called the bore in the Gulf of Cambay[1] Colonel Burr, who commanded the British, was now informed that Major Ford was advancing from Dapuri, on the W, and in order to facilitate the junction he moved the main force to a position about a mile in advance, and to the S W of the village of Kirkee The Mahratta leaders had been tampering with Ford's regiment, which was paid by the Peshwa. A strong body of horse, therefore, under Moro Dikshit, the Prime Minister of the Peshwa, advanced about 4 P M. upon the Dapuri battalion, but Major Ford, throwing back his right wing, opened a heavy fire upon the Mahrattas, both of musketry and from three small guns. Among the Mahrattas who fell was Moro Dikshit

In the meantime Gokhale had organised an attack on the left flank of the British main force, and this was led by a regular battalion commanded by a Portuguese named De Pento, and after his discomfiture a select body of 6000 horse, with the Jari Patka, or golden pennon, flying at their head, charged the 7th Bombay Infantry as they were pursuing De Pento's men. Gokhale's horse was wounded in this charge, and his advance was stopped There were other gallant leaders —such as Naro Pant Apte and Mahadeo Rao Rastia — but a swamp in their front checked the charge of the Mahrattas As it was, some cut their way through the sepoy battalion; but instead of turning back, when they might have destroyed the regiment, they rode off to plunder the village of Kirkee, whence they were repulsed by a fire of grape After this charge the Mahrattas drew off On the 13th General Smith's army arrived from Sirur, and on the 17th crossed the Mula-Mutha River at Yeravda (Yerrowda) ford, meeting with only slight resistance from the Peshwa Poona city now opened its gates to the victors In Ford's regiment there were seventy Mahrattas, yet none deserted on the day of battle, though promised vast sums. After the action the Mahrattas, but only the Mahrattas, joined the enemy.

Kirkee is the regimental centre

[1] *Grant Duff*, 4, 480 (Oxford University Press edition, 1921).

of the group of Royal Indian Engineers. To the *Small Arms Ammunition Factory* and to the *Arsenal* permission to enter must be obtained from the officer in charge.

All Saints Church, Kirkee, near the railway, was consecrated in 1841. There are two colours of the 23rd Regiment Bombay Light Infantry inside the W. door. Amongst the memorial tablets is one to thirty officers of the 14th King's Light Dragoons, who died or were killed between 1841 and 1859, and another to ninety non-commissioned officers of the same regiment. S.E. of the Church is the *Roman Catholic Chapel of St Ignatius*.

On the road to Poona is *Holkar's Bridge*, over the Mula River, a stream which encircles Kirkee on the N., E., and S. In July 1912 this bridge was several feet under water. About 60 yds. S.W. of the S. end of the bridge is *Holkar's Tomb*, a temple to Mahadeo (Siva) in an oblong enclosure, erected in memory of Vithoji Rao Holkar, who was trampled to death by an elephant at Poona in 1802 (p. 523) and of his wife, who became a *sati*. On the right of the road is an old English cemetery. Beyond the Mula the road passes East Kirkee with the Deccan College, and then come the *Jamsetji Bund*, the *Fitzgerald Bridge*, and the *Bund Gardens*, for all of which see below under Poona.

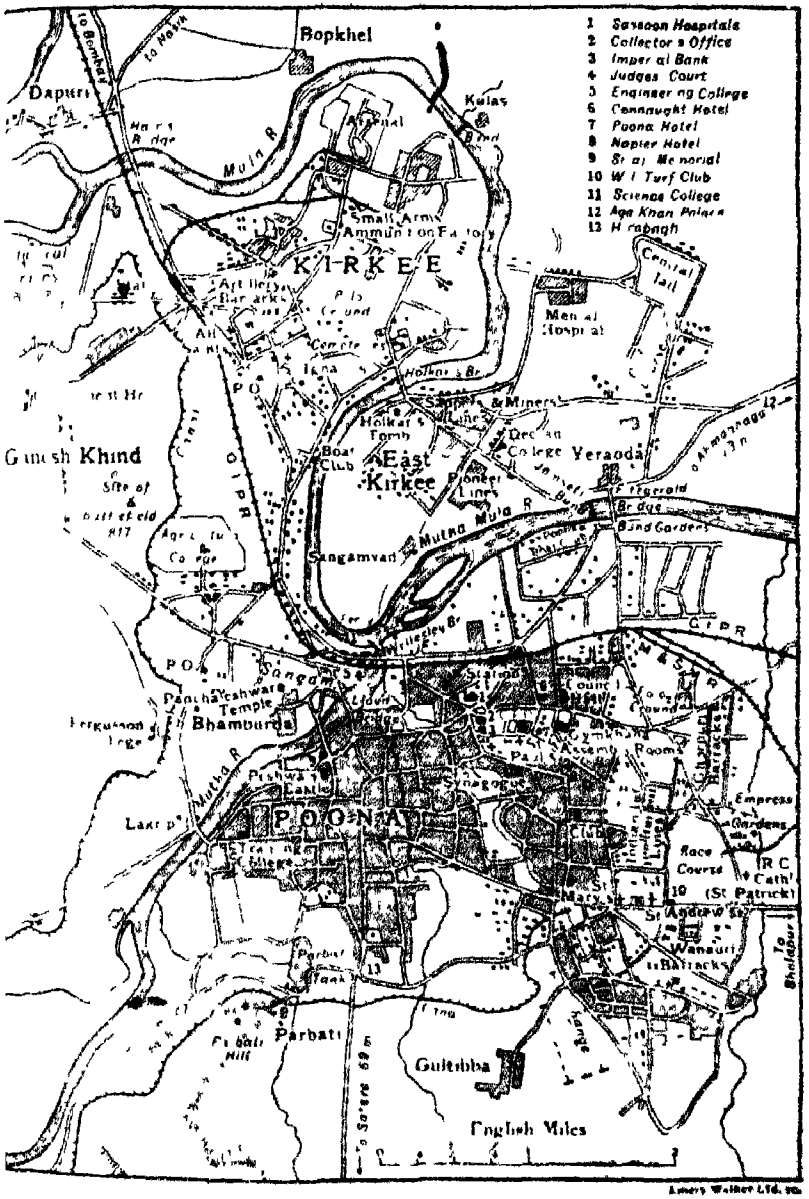
Government House is at Ganeshkhind, 1½ m. S.W. of Kirkee railway station. The name is derived from a small *khind*, or pass, between hills, about ¼ m. S.E. of the house, which resembles a modern French château, and has a tall, slim tower, 80 ft. high, from the top of which there is a fine view, including Kirkee and the Parbati Hill. It was built in 1866 to supersede the old Government House at Dapuri, a fine building, which had been Major Ford's headquarters in 1817. The house contains a ballroom, darbar-room, etc., and has a flower gallery, or garden corridor, 90 ft. long, also a painting by Wales of the signing of the Treaty against Tipu Sultan in 1780.

To the N. of Government House are the **Botanical Gardens**.

119 m. **POONA**, * junction of the G.I.P. and Madras and S. Mahratta Railways. The railway station is situated at a corner of the city and Cantonment, and close to the public offices. The Cantonment is E. of the city, covering an area of 4½ sq. m. within its limits. N. to the Mutha-Mula River and for 2 m. along the road leading to Kirkee Cantonment are the houses of the greater part of the European population. The remaining European quarter, known as the Civil Lines, is to the N.W. of the Cantonment, and is divided by the railway line into two sections. Poona (lat. 18° 31′, long. 73° 51′; altitude 1905; pop. 258,197) is the residence of the Government of Bombay during the rains.

The first mention is in the Mahratta annals of 1599 A.D., when the parganahs of Poona and Supa (S.E.) were granted to Malaji Bhonsla (grandfather of Sivaji) by the King of Ahmadnagar. In 1750 it became the Mahratta capital under Balaji Baji Rao, the Brahman Peshwa, or chief minister. (Pandit Pradhan) who deposed the descendants of Sivaji and im-

POONA and KIRKEE



Emery Walker Ltd. sc.

prisoned them in the Fort of Satara (p. 537). In 1763 it was plundered and destroyed by Nizam 'Ali. On the 25th of October 1802, Jaswant Rao Holkar defeated the combined armies of the Peshwa and Scindia, and captured all Scindia's guns, baggage, and stores. It was occupied by Wellesley in 1803. After the battle of Kirkee (p. 516), on 17th November 1817, Poona surrendered to the British.

The city stands on the right of the Mutha River, before it joins the Mula. At its extreme S. limit is the Hill of Parbati, so called from a celebrated temple of the goddess Durga, or Parbati, on its summit (see p. 523). A few m. to the E. and S.E. are the hills which lead up to the still higher table-land towards Satara. The *Aqueduct*, now unused, was built by one of the Rastias, a family of great distinction amongst the Mahrattas. It starts from a well in the hillside near Khadakwasla, and supplied water to a reservoir at Sadashiv Peth. There are also extensive water-works, constructed mainly through the liberality of Sir Jamsetjee Jeejeebhoy.

The Gymkhana Assembly Rooms, in the middle of the station, were built in 1888, and consist of a large wooden building with a handsome ballroom. In the grounds is a fine cricket ground. The United Service Library and Reading Room are in the upper storey.

Near the Assembly Rooms, on the road to the Bund Gardens, is **the Council Hall**, containing some pictures of interest, including those of Sir Bartle and Lady Frere, Lord Napier of Magdala, Sir Salar Jang of Hyderabad, Maharaja Khande Rao Gaekwar, and other notable men of Western India.

Opposite the Council Hall is the **Daftar or Record Room**, which contains priceless records of the Peshwas.

The *Sassoon Hospitals*, in the Gothic style, are at the end of the Arsenal Road. The Jacob Sassoon Hospital for Europeans and Jews was built in commemoration of the visit of the Prince and Princess of Wales in 1905-6. It was designed by Mr John Begg, Consulting Architect to the Government of Bombay, and erected by the P.W.D. The cost was borne by Sir Jacob Sassoon. The foundation-stone was laid by Lord Lamington, and the building was opened in 1909 by Sir George Clarke (the late Lord Sydenham). The nursing is carried on by the Hospital Nursing Association, supervised by the Wantage Sisters. There is a medical school for the training of sub-assistant surgeons attached to the hospitals.

Fronting the main gate is the handsome **War Memorial**, erected by public subscription in honour of "the Men of all classes and creeds, who went forth from this City and District of Poona to fight for the Empire in the Great War."

Opposite the hospitals are the *Collector's Cutcherry* and the *Government Treasury*. Close by is a large building in grey stone, erected in 1915, to accommodate the Government Offices. About 250 yds. S. of St Paul's Church is the *Jews' Synagogue*, a red brick building with a tower, 90 ft. high, consecrated 29th September 1867. *Mr David Sassoon's Tomb* adjoins the synagogue, which was built by him. The mausoleum is 16 ft. sq. and 28 ft. high.

S. of St Paul's Church is *St Mary's* Church, consecrated by Bishop Heber in 1825. The font, in the S.W. corner, is surrounded by stained-glass windows.

E. of St Mary's is the *Race-course*, about 1 m. long, and the *Western India Turf Club* is N. The races are held from July to September Close also are the *Gymnasium*, *St Andrew's Presbyterian Church*, and the *Masonic Lodge*.

To the E of the Race-course are the celebrated **Empress Gardens**, containing grand specimens of tropical forest trees, and S of these the handsome *R C Cathedral* dedicated to St Patrick

An Industrial Museum is in the Reay Market and one (1915) of Mahratta relics at 313 Sadashiv Road

The Scottish Mission (Church of Scotland, amalgamated in 1929), the American Mahratta Mission and C M Zenana Mission, are conducted in the city and suburbs

The *Society of St John the Evangelist* has a mission at Poona, the mission-house is at Panch Howds, Vetal Peth In the compound stands the *Church of the Holy Name*, with a lofty campanile, modelled on the famous Campanile at Venice, with a good peal of bells There are boys' schools, an Industrial School, an Orphanage, a School for Catechists, and a Hospital

The *Sisters of St Mary the Virgin* (Wantage) also have their mission-house at Panch Howds, and in the compound the Epiphany School for high-caste girls, and St Michael's School for low-caste girls The Sisters have also under their charge St Mary's High School for European and Eurasian girls (self-supporting), a village school at Parbati, and another at Yerandawana, 1 m from Poona.

The Sangam is the name given to the tongue of land at the confluence of the Mutha River, flowing from the S, with the Mula River, coming from the N W.

The **Wellesley Bridge**, 482 ft. long and 28½ ft broad, crosses the Mutha River to the Sangam promontory, close to its confluence with the Mula It takes the place of a wooden bridge erected to commemorate the victories of the Duke of Wellington in India. This bridge, designed by Colonel A U H Finch, R E, was opened in 1875

On the left hand, after crossing the Wellesley Bridge, are the *Judge's Court*, the *Poona Engineering College* (1859), and a long, low building (Sangamvadi), which stands on the site of the British Residency, burnt in 1817.

At the E end of Wellesley Bridge a path to the left leads to a garden containing temples. The first has a tower 40 ft high. In the middle of the garden is a second temple. A third temple at the end of the garden was built by Holkar, who destroyed two other old temples to build it. All are dedicated to Mahadeo

At 300 yds. from the Engineering College is Mr Bomanjee Dinshaw Petit's house, called Garden Reach, built between 1862 and 1864 Permission to view is usually granted on application when the family is not in residence The gardens are beautiful, and extend along the banks of the river The rooms in the principal house are floored with marble. The dining-room is connected with the house by a long, open gallery Beside it is an open room, with sides of carved wood, where the Sassoon family, the former owners, used to dine

during the Feast of Tabernacles. The ceiling of the drawing-room was beautifully decorated by Poona artists In it is a full-length portrait of Mr David Sassoon.

After passing the Engineering College, a side road over the level crossing leads to Bhamburda

The main road continues to Government House, Ganeshkhind (p. 518) The *Meteorological Observatory* was opened by Sir Leslie Wilson in July 1928, when the Indian Meteorological Department was transferred here from Simla On the right is the *College of Agriculture* (built in 1911 from designs prepared by the late Mr G Wittet), with extensive gardens Its white dome forms a conspicuous landmark On the return from Ganeshkhind the city is reached by a road passing the *Fergusson College* (1884), the *Bhandarkar Oriental Institute*, and the *Women's College* at Hingne

From Garden Reach it is a pleasant drive of 1¾ m *viâ* the Boat Club and Holkar's Bridge, to the *Jamsetji Bund* and the *Fitzgerald Bridge* Across the bridge is Yeraoda (Yerrowda), where H H. the Aga Khan has a palace (1860). The *Bund* of stone dams the Mula river, and on the S side of it are the **Bund Gardens**, of 6 acres

Opposite the *Bund* is *Bund Hill*, on which stands an ancient temple, and the *Purna Kuti Palace*, erected by the late Sir Vithaldas Thackersey Here the British guns were mounted during the crossing of the Yerrowda ford (17th November 1817, p 517): and hence comes the alternative name of *Pisquet Hill*. Above is the broad stream, 350 yds wide, on which regattas take place, chiefly in February.

In E Kirkee is the **Deccan College**, built of grey trap-stone, in the Gothic style, designed by Captain H C Wilkins, R E The **College**, which was removed to the present building in 1864, was originally the Poona Sanskrit College The hall, 70 ft. long, used for the Library, contains portraits of former principals and professors, including Dr Wordsworth, a nephew of the poet, Sir Ram Krishna Bhandarkar and Prof Kielhorn, the great Orientalists, Mr F. W Bain, the author of *The Digits of the Moon*, and Sir Edwin Arnold, and also of the founder, Sir Jamsetjee Jeejeebhoy, the first Parsi baronet. Another road leads N to the Teravda Golf-course

The *Khumbharves Dharan* Causeway on the Mutha River at the approach from the Bombay Rd is replaced by the Lloyd Bridge (514 ft by 53 ft, 11 spans, opened 1922), which forms an impressive entrance to the heart of Poona city It was opened by Sir George (the late Lord) Lloyd, Governor of Bombay, in 1922 The Law Courts are near the bridge

The streets of the **City**[1] are wide, and some of the older houses are substantial and picturesque It is divided into nineteen divisions, called *peths*, some of them named after the days of the week on which the market was held The Sadashiv Peth is named after the general killed at Panipat (1761). Amongst the industries may be mentioned the making of

[1] See *Thirty-four Years in Poona City*, by E F Elwin (Mowbray & Co, and Edn, 1922); *Poona in Bygone Days*, by D B. Parasnis (Times Press, Bombay, 1922).

gold and silver thread and wire for embroidery and for a simple kind of jewellery, the stringing of beads and berries for ornaments, and brass-work of all kinds.

The most convenient way of entering the city is by crossing the Lloyd Bridge The road leads past the interesting *Panchaleshwar Temple*, of great antiquity, and the *Sivaji Memorial Hall* and *Military School*, of which the foundation-stone was laid by the Prince of Wales in 1922 The equestrian **Statue of Sivaji** (in front of the Hall) was unveiled by Sir Leslie Wilson, Governor of Bombay, on 18th June 1928 The bronze figure, which is the work of Mr V. P Karmokar, an Indian sculptor, and was cast in Bombay, is 31 ft high and weighs 8½ tons Poona owes this striking memorial of the Mahratta hero largely to the Maharaja of Kolhapur (p 539)

On the S side of the Mutha is the magnificent gateway of the **Shanwar Wada** (Saturday Palace), which was built by the grandfather of the last Peshwa, and was burnt down in 1827 Only the massive walls remain Excavations have disclosed the gardens of the palace with an elaborate system of irrigation The spikes in the gate were placed to prevent the forcing of the doors by elephants Remains of frescoes are also to be seen Within are the Guard-house and Nakkar Khana (drum room) Above the gateway is a small balcony Here was the terrace from which, in 1795, the Peshwa, Madho Rao Narayan, fell, and died two days afterwards of his injuries, aged 21. Here, too, in 1773, Narayan Rao was savagely murdered by two of his guard at the age of eighteen, after he had been but nine months Peshwa. Behind was the house of Nana Phadnavis (now English School), and W. is a temple of Onkareshwar

In front is a memorial to the Mahratta soldiers who fell in the War A stone bridge leads to the village of Bhamburda and the Sangam.

Not far from the palace is a street in which, under the last Peshwa, offenders were executed by being trampled to death by elephants One of the most memorable of these executions, on account of the princely rank of the sufferer, was that of Vithoji Holkar, brother of Jaswant Rao Holkar who, later in the year, won the Battle of Poona in vengeance Baji Rao II. witnessed the scene from a window of his palace, where, on the morning of the 1st of April 1802, he took his seat with his favourite Balaji Kunjar

In the Budhwar, or "Wednesday," quarter of the city are some old Mahratta Palaces The visitor should on no account miss the delightful **Viaram Bagh** palace, with its beautiful pillars and courtyard, and its wooden porch This almost perfect example of an old Mahratta palace has been used in turn as a Sanskrit College, a High School, and a Court

In Shukruwar (Friday) Peth the Scottish Mission has built a hospital, known as the N.M. Wadia Hospital

The **Parbati Hill**, with its temples, is situated at the extreme

S.W. of the town on the road to the Kharakwasla reservoir (see p 525), about 3½ m. from the Poona ry. stn ; the road to Sinhgarh leads to it past the *Hirabagh*, or "Diamond Garden." In a cemetery here is interred the celebrated African traveller Sir William Cornwallis Harris, Major in the Bombay Engineers, who died in 1848[1] The Hirabagh had a lake and island and the villa of the Peshwas, mosque, and temples Lord Valentia mentions it in his account of a visit to the Peshwa in 1804 The lake has been drained for sanitary reasons, and the building is occupied by a social club, which is open to members of all nationalities

The Parbati temple was built by Peshwa Balaji Baji Rao, who ruled from 1752 to 1761, in honour, it is said, of the Raja at Satara. A long succession of steps and ramps leads up to the top of the hill and to the temples At each corner of the first court are small shrines to Surya (the Sun), Vishnu, Kartikkeya (the Hindu Mars), and Durga , and in the centre is the principal temple dedicated to the goddess Durga or Parbati, the wife of Siva, so called from Parbat, "a mountain," as she is said to be the daughter of the Himalaya In the temple is a silver image of Siva, with images of Parbati and Ganesh, of gold, seated on his knees. During the Diwali it is lighted up in a beautiful manner

On the N W side of the enclosing wall is a Moorish-looking window, whence, it is said, Baji Rao watched the defeat of his troops at Kirkee From the top of this wall, reached by narrow steps, there is an extensive view over Poona, Kirkee, and surrounding country, including Parbati Tank, to the E., and Parbati village, S. of the tank, over the Hirabagh to St Mary's Church and the Jews' Synagogue, far to the N.E.

S W is a ruined palace of the Peshwas, which was struck by lightning in 1817, the year of Baji Rao's overthrow by the British A rupee may be given to the Brahman who shows the place, for the benefit of the temple and the numerous blind persons who frequent the hill.

At the foot of the hill is a square field, in the time of the Peshwas enclosed by high brick walls At the end of the rains, about the time of the Dassara, gifts in money were presented to all Brahmans In order to prevent the holy men from receiving more than their share, they were passed into this enclosure, at the gate of which stood a vast cauldron filled with red pigment Each as he entered was marked with this, and nothing was given till all had gone in They were then let out one by one, and money was given to each. On one occasion the Peshwa is said to have lavished £60,000 in this manner. There are several other temples and shrines at the top of the hill.

About 6 m from Poona is the Khondwa Leper Asylum, managed by the Mission to Lepers in India and the East The asylum accommodates 200 lepers, and was opened in 1909

Excursions from Poona

A road runs 73 m. N.E. to Ahmadnagar (see motor-trip described in Chap. VI of *Topee and Turban*, by Lt.-Col Newell (John Lane, 1921), continuing to Nasik, 132 m

15 m. N.E from Poona, along the Ahmadnagar road, is the battlefield of **Koregaon (Coryganm)**. Here 600 Bombay sepoys, under Capt Francis Staunton from Sirur, kept 25,000 Mahrattas, under the

[1] He was the author of *Wild Sports in the West* and the *Highlands of Ethiopia*

Peshwa himself, in check on 1st January 1818—one of the most notable achievements in the history of the Bombay Army. A monument 70 ft high (1822) stands in a square enclosure on the right bank of the River Bhima opposite the village There is an inscription in English on the W. and E faces, and another in Marathi on the N face The 2nd battalion of the 1st Bombay Infantry (now the 2/4th Bombay Grenadiers) and the Poona Auxiliary Horse (now the 17th Poona Horse) took part in the engagement, and the word "Corygaum" is emblazoned on their colours

43 m from Poona is the deserted Cantonment of Sirur on the Ghod river There are some interesting tombs in the cemetery The D.B is ½ m farther on

15 m S.W. from Poona is **Sinhgarh** (the "Lion Fort").[1] At 12 m from Poona, is passed the Kharakwasla reservoir, Lake Fife, where excellent sailing and fishing can be had The pretty bungalow may be occupied with the permission of the Exec Engr, Poona Irrigation Division The dam, 107 ft high, spans the valley of the Mutha River, and was the first (1879) of the large dams built in the Deccan The water feeds the Mutha Right Bank canal, and supplies drinking water to Poona and Kirkee. A National War Academy is near by.

The ascent to Sinhgarh is in part almost perpendicular. Being 4162 ft. above the sea, it is cool. There are several bungalows here occasionally occupied by summer visitors from Poona The famous stronghold is intimately associated with the history of Sivaji. It was taken, during his rebellion against Bijapur (February 1670), by the renowned Tanaji Malusre. The Mahrattas scaled the precipice in the darkness and surprised the garrison

"The loss of the assailants was estimated at one-third their number, or upwards of 300 killed or disabled In the morning 500 gallant Rajputs, together with their commander, were found dead or wounded, a few had concealed themselves and submitted, but several hundreds had chosen the desperate alternative of venturing over the rock, and many were dashed to pieces in the attempt" Tanaji was killed at the head of his men The fine gateway should be noticed, and the figure of a Mahratta warrior in a small shrine which marks the spot where Tanaji fell There is also a monument to Tanaji's left hand, which he lost before he received his fatal wound. The story is popular in Mahratta history.

On the 1st of March 1818 Sinhgarh was taken by British troops without loss, after a bombardment from neighbouring hills

Purandhar is another hill fort to the S E, about 17 m as the crow flies, and 24 m by road, from Poona. The upper and lower forts are situated more than 300 ft below the summit, which is 4560 ft above sea-level, and are protected by a perpendicular scarp.

A treaty was signed here on 1st March 1776, between the ministers of the Peshwa and Col Upton, the envoy of Warren Hastings, who marched across Central India from Calcutta and back to the East coast In March 1818 Purandhar was attacked and taken by a British column under General

[1] See *Poona and its Battlefields*, by Col. L W. Shakespear (Macmillan, 1916)

Pritzler. It is still used as a sanatorium for summer visitors. District Bungalow (for the use of officials on tour) Panthers are found in the hills and deer and other game in the neighbourhood. The temple "Kedareswar" crowns the summit of the hill.

In a garden beside the Zaamavati tank (excavated by Sivaji) a granite cross marks the site of the bungalow in which Lord Frederick Fitzclarence, Commander-in-Chief in Bombay, a son of William IV., died on 30th October 1856. The church contains a brass tablet to his memory.

Poona to Madras.

167 m. from Bombay on the main line to Madras is **Dhond** junction (R.). A colony of railway servants is located here. The Dhond - Baramati N.G. railway runs S. to Baramati, 28 m.

From this place also the Dhond-Manmad Chord of the G.I.P. Ry. runs N. (opened 1878). The only place of importance on this line is

51 m. **Ahmadnagar** station, usually called Nagar (R., D.B., Inspn. Bung.), founded in 1490 by Ahmad Nizam Shah Bahri, son of a Brahman of Vijayanagar, the first of the Nizam Shahi dynasty, which ended 1636. His territory was the only part of the W. coast to which the ravages of Portuguese piracy did not extend. They maintained a friendly intercourse for many years with Ahmadnagar. The power of this State extended over the greater part of Berar and the province of Aurangabad and some districts in Khandesh, Kalyan, and from Bankot to Bassein, in the Konkan. The fort, but not the whole kingdom, fell into Akbar's hands in 1599, after sustaining a siege under Chand Bibi (killed), widow of 'Ali Adil Shah, of Bijapur, the "Noble Queen" of Meadows Taylor's novel. It was taken from the Nizam by the Mahrattas in 1760. In 1797 the fort was made over by the last Peshwa to Daulat Rao Scindia, from whom it was taken by Arthur Wellesley, afterwards Duke of Wellington, on the 12th of August 1803. A tamarind-tree, under which he is said to have lunched, used to be pointed out on the S.W. side of the fort, but it has been blown down.

The fort is 2½ m. N.E. of the railway station. Close to it are *Christ Church* and a R.C. Church. The D.B. is N.W. of it. The Cantonment was used during the Great War for the internment of Germans. The gate of the fort towards the Poona road is called the Malivâda Darwaza, and just outside it are the graves of two British officers who fell here when the place was stormed in 1803. The town is 3 m. from the railway.

The Emperor Aurangzeb (Alamgir) died at Ahmadnagar on the 3rd March 1707, at the age of 97, and his body is said to have rested in the walled enclosure known as *Alamgir's Tomb*, prior to its removal to the mausoleum at Aurangabad (p. 74). To the E. of the tomb, which faces a mosque, is a white marble Darbar Hall (fine view from the roof). 2 m. S.E. of the town is the Pariabagh, or "fairy garden," an old palace of Burhan Nizam Shah (1508-53), completed 1583.

½ m. N.E. of the town is the mausoleum of Ahmad Nizam Shah with walls inscribed inside in Arabic gold letters. A canopy near by covers the grave of an elephant, which helped to capture (p. 570) Rama Raya of Vijayanagar at the battle of Talikot (1565). The Bagh Nizam is on the bank of the Sena river.

The tomb and mosque of Rumi Khan commemorate the maker of a great gun at Bijapur (p 569)

Large schools and branch missions are maintained by the S P G., the American Mission, and Education Society

The **Tomb of Salabat Khan**, commonly called that of **Chand Bibi**, is 6 m to E , on a hill (alt 3080 ft) The building is octagonal and of three storeys Below is the crypt, in which are two tombs There is no inscription

184 m from Bombay on the main line to Madras is **Diksal** station, 3 m. beyond which the Bhima River is crossed

234 m **Kurduwadi** Jn (R , D B), reached by the railway in 1859 From here the Barsi N G Ry leads N.E , through Barsi, to (86 m.) Latur, a great cotton and grain centre in H E H the Nizam's dominions, and S to (32 m) Pandharpur and (118 m) Miraj, where it connects with the metre-gauge line of the Madras and S Mahratta Ry from Poona to Belgaum At Ashti, 19 m S , in a battle (Feb 1818), Bapu Gokhale was killed and the Satara Raja released.

Pandharpur (D.B), on the right bank of the Bhima river, with a very celebrated shrine (1228) to Vithoba, an incarnation of Vishnu Immense crowds of pilgrims visit the temple, particularly in July, at the Ekadashi Fair A pilgrim tax is levied at the time of the three chief fairs, to provide for the sanitary safety of the town. On the Bhima River there are eleven ghats, or landing-places. In the centre of the town, on high ground, stands Vithoba's Temple, inscriptions on which show that portions of it were standing in the 14th century. There are numerous other temples in the river bed

283 m **Sholapur station** (D.B. good ; pop. 212,620 ; alt 1560 ft) means "sixteen villages" The fort (S W), of Muslim construction, consists of a double line of lofty battlemented and towered walls, surrounded by a moat. In May 1818 Thomas Munro and Pritzler marched against the remnant of Baji Rao's infantry, attacked them under the walls of Sholapur, and routed them with great slaughter The fort, after a short siege, surrendered. The Cantonment, S.E of the railway station, has been abandoned

The city, which lies N E of the railway station, has grown greatly owing to the development of the cotton industry There are five mills

Sholapur has a King Edward VII Memorial Hospital and fifty-two schools, including a Government High School It is the headquarters of the American Marathi Mission, which has several schools and also controls the Leper Asylum. There is a golf-course.

4 m N W of the city of Sholapur, on the Osmanabad road, is the **Ekrukh Tank** (1873), 6 m. in length, formed by an embankment of earth 7000 ft long and 76 ft high, across the Adhela River. Three canals from it irrigate the surrounding country. It also supplies the city with water.

43 m N is **Osmanabad**, or Dharashiv, in the Nizam's Dominions. Groups of Jain and Vaishnava caves, which may be assigned to the period from 500 to 650 A.D., lie round the town. At

Tuljapur, 28 m. from Sholapur and 14 m. from Osmanabad, is the temple of Tulja Bhawani (Durga), which is visited by Hindus from all parts of India. Meadows Taylor lived here and mentioned it in a novel, *Java*.

292 m. **Hotgi** junction station (R.). From this point the Madras and S. Mahratta Railway branch, opened 1884, and since extended to Sholapur, runs S. to **Bijapur** and Gadag junction (see Route 29).

323 m. **Dudhni**, the last station in the Bombay Presidency. The line now enters the dominions of the Nizam of Hyderabad.

353 m. **Gulbarga** station (D.B.). Gulbarga was the first capital of the Bahmani Kingdom of the Deccan (1347-1525 A.D.), but was abandoned by Sultan Ahmad Shah Bahmani in 1428 in favour of Bidar (p. 548). Houses for the Nizam's officers, and public offices, have been erected on the *Maidan*, which stretches from the railway station to the city. The old fort in the background, black with age and the numerous domes with which the plain is dotted, relieve the aspect.

The Bahmani Kingdom, founded at the close of the reign of Muhammad Tughlaq Shah, King of Delhi (1325-51) by Hasan Ganju, who took the name of Brahman, dissolved into the five kingdoms of Bijapur, Golconda, Ahmadnagar, Bidar, and Berar. Bidar came to an end in 1609, and the last, Golconda, was taken by Aurangzeb in 1687.

The outer walls and gateways and most of the old buildings of the **Fort** are in a very dilapidated condition. The *Citadel*, or *Bala Hissar*, has suffered least: it is a solid block of masonry. On the top of it is a curious old gun, 26 ft. long, and having twenty pairs of iron rings attached to it, by which it used probably to be slung or lifted. Close by, at the S. extremity of the inner fort wall, are the remains of an old Hindu temple. A plan is on sale.

In the old fort is the **Jami Masjid**, a Pathan mosque, built in the reign of Firoz Shah. There is a tradition that it was built by a Moorish architect from Cordova as a replica of the great cathedral mosque in that city. Visitors are expected to take off their shoes. It measures 216 ft. E. and W. and 176 ft. N. and S., and covers an area of 38,016 sq. ft. It is peculiar among the great mosques of India in that the whole area is completely covered over, by a large dome over the mihrab, one at each corner and 75 smaller ones. The light is admitted through the side walls, pierced with great arches on all sides except the W. It is maintained by the Hyderabad State Archæological Dept.

The grand old **Tombs** in the Eastern quarter, huge fortress-like buildings, surmounted by domes 100 ft. high, are the burial-places of Bahmani Kings. They are roughly yet strongly built, but with the exception of some handsome stone tracery there are no exterior ornaments. The interiors are more elaborately finished.

Some little distance from these tombs is the much venerated shrine or *Dargah* of *Banda Nawaz*, or *Gisu Daraz* (1321-1422), a saint of the Chishti family (see p. 218), who came to Gulbarga during the reign of Firoz Shah Tughlaq in 1413. The inner shrine is accessible only to Muslims, but others may enter the courtyard on taking off their shoes.

The structure is said to have been erected in 1640 by a descendant during the reign of Mahmud 'Adil Shah. Ahmad Shah Wali, Firoz Shah's brother, made many valuable presents to the saint, and gave him large *jagirs*, and built him a magnificent college close to the city Some of his descendants still reside at his tomb Close by are some buildings, consisting of a sarai of General Afzal Khan, mosque, and college (*Madrasa*), said to have been erected by Aurangzeb, who visited Gulbarga on several occasions There is also a dome of polished ashlar masonry, built by Chand Bibi 'Adil Shahi as her tomb, but she was buried at Bijapur

In the town is a cross-shaped bazar, 570 ft by 60 ft, on pillars with sixty-one Hindu arches, with a block of buildings at either end

370 m **Shahabad** station (R), known for its limestone quarries Large quantities of the stone, and cement made from it, are exported

376 m **Wadi** junction, reached by the railway in 1870 (R) From here H E H. the Nizam's Railway, built by a Guaranteed Railway Coy and opened in 1894, and acquired by the State in 1930, runs E to Hyderabad and Bezwada (Route 28) Through carriage on the mail train

427 m **Krishna** station Here the railway crosses the Kistna (=Krishna) River by a bridge of 36 spans, 3855 ft long (1873), into the Raichur Doab

443 m. **Raichur** station (R., alt 1318 ft.). The G.I.P. Railway and the Madras Railway N.W. line met in 1871. Madras is distant 351 m.

Raichur has been restored to the Nizam's dominions since 1860, for assistance rendered in the Mutiny, having been assigned in 1853 In 1357 it formed part of the dominions of the Bahmani Kings It was included in the Kingdom (Sirkar) of Bijapur, and was governed in 1478 by Khwaja Mahmud Gawan When Bijapur became independent in 1489, Raichur was its first capital.

The *Fort* is about 1½ m. from the railway station The N. gate, flanked by towers, is best worth attention. There is a stone elephant, not quite the natural size, carved out of a boulder about 50 yds outside the gate On the inner wall a carving shows a stone beam 41½ ft long being carted. At right angles to this gate is another called the Kasba Darwaza. Outside the latter is the door of a tunnel, out of which the garrison could come to close the gate Near the W. gate (Sikandaria) is the old palace, with immensely thick walls

The *Citadel* (1294 A D, 290 ft. above the plain) should be seen for the sake of the view The ascent commences from near the N gate. No mortar is used in the walls. On the left is a row of cells belonging to the *dargah*, or shrine, and at the E end, overhanging the precipice, is a stone pavilion Near this, on the E, is a mosque 18 ft high; and on the S side is a place for a bell or gong 7 ft. high, with stone supports and a stone roof. The whole surface of the top is 70 ft. sq

Maski, with prehistoric remains, is reached *viâ* Lingsugur (56 m. W.) and then 17 m. S.E.

461 m The railway crosses the Tungabhadra River, which forms the boundary between the Nizam's dominions and the Madras Presidency, by a bridge 4060 ft. long (1871)

487 m. **Adoni station** (Adwani—D.B K.), principal cotton-mart in the Deccan According to tradition, the town was founded 3000 years ago by Chandra Singh of Bidar After the Battle of Talikota in 1565 the Sultan of Bijapu appointed Malik Rahman Khan, an Abyssinian, to govern it, which he did for 39 years, and died there His tomb on the Talibanda Hill is still an object of religious veneration He was succeeded by his adopted son, Sidi Mas'aud Khan, who built the lower fort and the Jami Masjid In 1690 Adoni was taken, after a desperate resistance, by one of Aurangzeb's Generals, and in 1740 fell to the first Asaf Jah

Salabat Jang granted it (1757) in *jagir* to Basalat Jang, his younger brother, who endeavoured to form an independent State. He died in 1782, and was buried at Adoni, and a fine mosque and tomb were erected over his grave and that of his mother. In 1780 the citadel was captured by Tipu Sultan after one month's siege He demolished the fortifications, and removed the guns and stores to Gooty In 1792 it was restored to the Nizam, and exchanged by him with the British in 1799 A D for other places The citadel is built on five hills, two of which rise 800 ft above the plain Half-way up the rock is a fine tank containing good water, and never dry

519 m **Guntakal** junction station (R.). From this junction the main line continues S E to Madras. Metre-gauge lines run S to Bangalore, N E to Guntur and (279 m) Bezwada, and W to Bellary, Hospet (for Vijayanagar), Gadag and (160 m) Hubli (Route 30) The railway to Bellary was built on the broad-gauge in 1871 and converted to metre-gauge in 1887.

536 m. **Gooty station** (R.). Nearly 2 m. S of the railway station is its famous hill fortress, first built between 1509 and 1530 on a precipitous mass of bare rock.

The Fort, which is 989 ft above the plain, and 2171 ft above sea-level, is approached by a long, winding, paved pathway, which leads to the summit It was the stronghold of Murari Rao Ghorpade, who helped Clive at Arcot in 1751, and was taken by Hyder 'Ali in 1776, after a siege of nine months, the water having failed, Murari was taken prisoner

At the foot is the English Cemetery, where rested until 1831 the body of Sir Thomas Munro, Governor of Madras, who died at Pattikonda, in Kurnool, on the 6th June 1827 His remains now lie in St Mary's Church, Fort St George, Madras, but a cenotaph stands in this cemetery There is a R H for Indians in the town, erected by Government to the memory of Sir Thomas Munro

560 m The Penner River is crossed by a bridge 1830 ft long (1869)

566 m **Tadpatri station** (R.). Bus service between Tadpatri and Anantapur The town was founded during the time of the Vijayanagar Kings, about 1485, when the highly decorative temples of Rameswaraswami and Chintalarayaswami were built They are about 2 m. from the railway station The one on the river-bank was never finished, but is the more imposing Fergusson (*Ind Arch.*, 1, 403, pictures on pp 405-6) wrote "The wonders of the place are two gopurams belonging to the second (the Rameswara), which is now a deserted temple on the banks of the [Penner] river. One of these

was apparently quite finished; the other on the North never carried higher than the perpendicular part. In almost all the gopurams of India this part is comparatively plain, all the figure-sculpture and ornament being reserved for the upper, or pyramidal, part In this instance, however, the whole of the perpendicular part is covered with the most elaborate sculpture, cut with exquisite sharpness and precision, in a fine close-grained stone"

m 581 The Chitravati River is crossed by a bridge 2670 ft long (1868)

m 589 **Mangapatnam**. A serious accident occurred in 1902 when a bridge was washed away and the mail train ran into the gap

m. 619 The Papaghni River is crossed

632 m from Bombay and 162 m. from Madras, is **Cuddapah** (Kadapa (station (R) The town (alt 430 ft) was formerly the capital of the Nawabs of Cuddapah. Situated between the Mahrattas, the Nizam, and Mysore, they were gradually crushed, and reabsorbed (1792) by the Hyderabad State In 1800 the Cuddapah, Kurnool, and Bellary Districts were ceded to the E I. Co., and Thomas Munro was appointed the first Collector of all three Places of interest, historical and archæological, are few, the principal being Gandikota and Siddhavattam Forts (ry stns, Kondapuram, 17 m. from Tadpatri, and Vontimitta, 14 m from Cuddapah, respectively). There are R.Hs. at both. The W taluks are noted for their ground-nut and cotton crops; while in the Penneru River-bed, near Cuddapah, are grown the melons for which the district is famous.

Jammalamadugu (R H, 13 m. from Muddanuru station, 34 m. from Cuddapah), is the headquarters of the London Mission in the ceded districts Owing to the many broad and unbridged streams in the district the roads are not suited to motor traffic. Persons travelling in the district must make their own arrangements for meals at R.Hs.

659 m The Cheyair River is crossed by a bridge 3500 ft long (1865)

710 m **Renigunta** (R), junction for the metre-gauge M branch of the M and S M Ry., which runs from Gudur on the line from Madras to Waltair (p 508) to Katpadi Junction (183 m) on the Madras-Bangalore line, and on to Villupuram (p 645)

On the line from Renigunta S E to Katpadi, opened 1891, are

6 m **Tirupati East station** (D B), celebrated for one of the most sacred **Hill Pagodas** (Sri Venkateswara Perumal) in S India, it stands at the top of the "holy hill" called *Tirumala* (part of the Seshachalam range) and is about 8 m. from the railway station Wooden and brass idols are a speciality of the lower town. There are several gopurams on the ascent visible from below The antiquity of the temple is indisputable, but its origin is involved in obscurity. The idol is an erect stone figure 7 ft. high, with four arms, representing Vishnu.

In the temple at Tirumala are copper statues of the Vijayanagar Raja Krishnaraya and his two Ranis, and of Venkatapatiraya. No European entered Tirumala till 1870, when the Superintendent of Police, in spite of the remonstrances of the Mahant, went up in search of an escaped forger No one but Hindus may enter the area The Seshachalam range is 2500 ft. high and quite bare, and has seven peaks. On the seventh peak, Sri Venkataramanachellam, is the pagoda, surrounded by a broad belt of mango, tamarind, and sandal trees. In front of it is a Hall of 1000 Pillars A picturesque stepped way leads from it to the temple gate, which is a fine one, admission to the temple is not granted. E of the temple is a tank, and a bungalow, belonging to the Mahant

14 m **Chandragiri** station The walled Fort is built on a large rounded mass of granite rising 600 ft above the valley, it is similar in architecture to the Vellore Fort (p 599) In the centre is the *Palace* of the Vijayanagar Rajas. After the defeat of Talikota in January 1565 the capital was changed to Chandragiri, taken by the Golconda Ruler in 1646, occupied by the Nawab of Arcot in 1750 and by Hyder 'Ali in 1782.

In the palace Sri Ranga Raya (1639) made to the East India Company the original grant of the land on which Fort St George (Madras) was built. The Government carefully preserve the palace, and it is used as an official residence. It is most picturesquely situated in the fort, and at the back of it is a high, rocky hill. The best way to visit it is to drive from **Renigunta**.

32 m. **Pakala**; junction for a metre-gauge line to (142 m.) Dharmavaram, junction for the Guntakal-Bangalore line (Route 30, p. 582).

51 m **Chittoor** (alt 988 ft.; D B K ¼ m from station), 24 m by road from Ranipet (Route 32). Hyder 'Ali died on 7th December 1782 at Narsingh Rayanapet, near Chittoor, where a monument marks the spot A view may be had from Chase's Folly, one of the surrounding hills, a bridle-path, built by the Judge who gives his name to the hill, leads to the summit There are some remarkable tombs in the old cemetery

From Renigunta station the main line, opened 1862, continues S E to

751 m **Arkonam** junction (R) The S W branch of the M and S M Ry to Jalarpet and Bangalore (Route 32) meets the Raichur N W line A metre-gauge branch of the S I Ry runs S to Conjeeveram (opened on the broad-gauge in 1865 and converted in 1881) and Chingleput (Route 34).

768 m. is **Trivellore** (Tiruvallur) station, 30 m by road from Madras. There is a large Vaishnava temple here (see p. 650) 4 m. from the station is the site of the old fort of *Tripasore*, which was captured by Sir Eyre Coote in 1781 Tripasore Fort was at one time the station for the East India Company's cadets, and afterwards for pensioners

794 m. from Bombay is **Madras** Central station (Route 33).

ROUTE 27

POONA to GOA by **Wathar** (for **Mahabaleshwar**), **Satara**, **Miraj** Junction (for **Kolhapur**), **Belgaum**, **Londa** Junction, the **Braganza Ghat**, and **Mormugão**

The metre-gauge line (opened 1887) of the Madras and Southern Mahratta Railway to (245 m) Belgaum and (277 m) Londa Junction, for Goa, branches off to the S from the broad-gauge line of the G I P Ry to Madras (Route 26), 2 m E of **Poona** railway station (see p 518)

48 m **Nira** station The Lloyd Dam at Bhatgar, which is close to this station, forms the source of supply to the Nira canals system It was inaugurated on the 28th October 1928 by Sir Leslie Wilson, Governor of Bombay Its length is 5333 ft, the area of the lake is 14½ sq m, and the catchment area 1a 128 sq m The cost was over 1¼ millions sterling The reservoir completely submerges a former dam and Lake Whiting (1885). It feeds the old Nira Left Bank Canal and a new Right Bank Canal, each over 100 m. long and irrigating 4000 sq. m. The value of such works may be appreciated from the fact that the famine in the Bombay Presidency from 1899 to 1902 involved an expenditure of three crores of rupees (£2,250,000) apart from the individual suffering caused These irrigation schemes have been fully developed, and the estimated value of the crops raised in 1934–35 amounted to two and a half crores, nearly two millions sterling.

Passing through three hill ranges, the line next reaches

69 m. **Wathar station** (R.).

Passengers can alight here for **Mahabaleshwar**, the principal hill station of the Bombay Presidency, about 40 m distant by road to the W

Motors can be had by giving notice to the mail contractor at Mahabaleshwar. Cars and buses, or single seats (S), can be hired also direct from Poona (Panchgani motor service, details from Station-master, Poona) It is a charming drive of about one hour, the first part through rolling country to

10 m the **Shirgaon** Ghat

21 m. **Wai** (D B) is situated on the left bank of the Krishna river, which is lined with pipal and mango trees, and with handsome flights of stone bathing-ghats Behind the city rise hills. One hill, 4 m to the N W., rises very abruptly, and has a hill fort on the top; it is called Pandav-gad, according to the tradition that Wai is the Vairatnagar visited by the Pandavas (**Introd.**, p lii). The river is lined with handsome temples the nearest to the D B is dedicated to *Ganpati*. the next to *Mahadev* and one, at some distance, to *Lakshmi*. They form the great charm of this most picturesque spot The *mandapam*, or canopy, in front of Mahadev's temple, is very light, and a fine specimen of carving in stone

Wai is a spot much famed in Hindu legend Here, according to old tradition, the Pandavas spent part of their banishment and performed many great works (Introd, p lix) On this account, and likewise because of its proximity to the source of the Krishna River, Wai is a place of great sanctity, and the Sanskrit school established here was once in much repute.

On leaving Wai the road begins a steep ascent to

28 m. **Panchgani** (two hotels), containing several boarding-schools for the European, Parsi, Hindu and Muslim communities. From Panchgani the road descends a little for one-third of a mile the country round is covered with low jungle and patches of cultivation

About 1 m from Mahabaleshwar, a small lake made by the Raja of Satara is passed on the right; it winds and is about 810 yds long, and not quite 200 yds broad

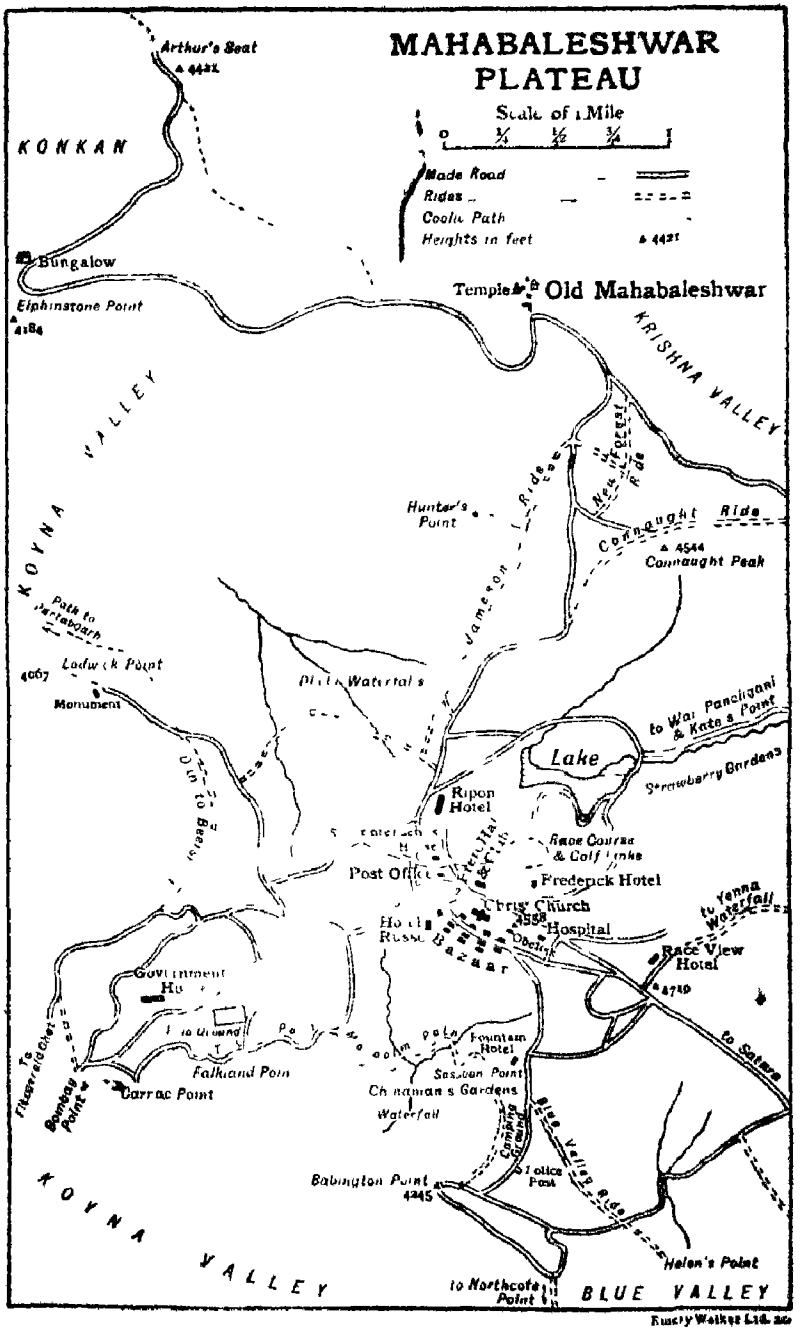
Mahabaleshwar [1] (Nahar or Malcolm Peth), 40 m from Wathar, is the hill station of the Bombay Presidency (founded in 1828 by Sir John Malcolm, then Governor) There are two seasons—April and May and after the rains from October From 1st October to 15th June mail motors run daily from Wathar to Mahabaleshwar, and direct from Poona to Mahabaleshwar (more convenient route, 75 m.) There are four leading motor service companies There is also access by launch from Bombay to Dharamtar and thence by road (91 m), or by road all the way The climate is delightful from October to March April and May are distinctly hot, with cool nights In June mists prevail and torrential rains (from 150 in to 400 in) fall till the beginning of October Christmas is a favourite season, and the climate usually dry and invigorating. The general height of the plateau is from 4000 ft to 4500 ft, with an abrupt descent to the E of 2000 ft., and to the W of from 3000 ft to 4000 ft. In clear weather the sea can be seen, which is in a direct line only about 30 m. W The plateau is heavily wooded with evergreen jungle, closely preserved by the Forest Department, but there is an absence of big trees Orchids and lilies flower in April and May, and ferns and general vegetation are seen at their best in October, in which month butterflies abound

The two hotels chiefly frequented by European visitors are Frederick's Hotel and the Hotel Russe, there is also a charmingly-situated Club, with residential quarters, and numerous furnished bungalows can be rented for the season Frederick's Hotel is on the road from Panchgani, overlooking the golf-links and about 500 yards E of the Club, the Hotel Russe is on the W of the bazar, about 300 yards S of the Club Rooms should be booked well in advance during April and May

Outside the Club is a lofty obelisk, erected in memory of Lieut.-General Sir Thomas Sidney Beckwith, Commander-in-Chief in Bombay, who died here in 1831 The English church is close by.

The chief view-points and expeditions are Elphinstone Point and Arthur's Seat (overlooking the abrupt descent into the Konkan), Old Mahabaleshwar, with a very sacred temple, from which the Krishna is said to rise; Connaught Peak, with view of the Plateau, Lodwick Point (4067 ft), with view of Pratapgad, Bombay Point, with perhaps the finest view of all; Kate's Point, on the road to Panchgani, the Falls of the Yenna to E and the Dhobi's Waterfall to W At Lodwick Point is a pillar erected by his son in memory of General Peter Lodwick (1783-1873) of the Bombay army, who "reached this point, alone, in 1827, after hours of toil through the dense forest." A second inscription records the death of a grandson, who went down in the *Persia*, torpedoed by

[1] See *Mahabaleshwar*, by D B. Parasnis (Bombay, 1916).



Rusey Walker Ltd. 20

a German submarine, on 30th December 1915

There are excellent walks and rides. Golf, polo, tennis, etc., can be played, and there is a library and reading-room at the Frere Hall (1864), the N E half of the club building.

Good vegetables are grown, and in the season strawberries can be had.

Panthers are common, and tigers are occasionally found on the plateau; but the ordinary visitor is hardly likely to get any shooting The plateau is very extensive Its proximity to the sea makes the climate cool and equable The view to the W, looking down upon the Konkan or narrow strip between the ghats and the sea, is very impressive

For local transport, tongas, landaus and victorias are available. Motors are only allowed on the hill under strict regulations, which can be ascertained on application to the Superintendent

Pratapgad (Partabgarh) (D B) is a picturesque hill fort crowning a precipitous rock remarkable as the stronghold (1656) of Sivaji—founder of the Mahratta empire. A charming drive of about 9 m. down the Fitzgerald ghat on the road to Mahad leads to the foot of the hill, whence a steep path ascends to the gates of the fortress. Chairs are available at the D B

Sivaji, having provoked hostilities with Bijapur, whose army he could not meet in the open, determined to parley with its General, Afzal Khan, at a personal interview, on condition that the two commanders should meet unarmed, in the midst, between the two armies, with only one armed attendant. They accordingly approached from either side attired in white robes, apparently muslin; but Sivaji wore defensive mail under his robe and turban, and carried concealed in his left hand a weapon called a Wâghnakh, "the tiger's claws," consisting of four sharp steel claws attached by rings to his fingers The Khan seized and stabbed him, but Sivaji drove these claws into him, tore out his vitals, and despatched him with a hidden dagger. His head was struck off and buried under the Afzal Burj in the fort. Meanwhile the Mahrattas, concealed in ambush in the jungle, rushed out upon the Bijapur forces and cut them to pieces

From Wathar station the railway line proceeds to

78 m **Satara Road** station From here it is a 10 m drive to **Satara** (2203 ft. high, motor-cars available, D B K), in a hollow between two ranges of hills, which rise above it on the E and W and partly overlap it on the S The hill on the W is the termination of a spur from the Mahabaleshwar Hills. From this hill to the city water is conveyed 4 m in pipes, and there are also two fine tanks The city has many historic recollections, and the station is one of the most salubrious and pleasant in the Deccan The *Cantonment* is about 1½ m. from N to S, and nearly the same from E to W In the S. end is the Residency, inhabited by Sir Bartle Frere in 1849, originally built about 1820 Outside the N gate of the old Residency were the British lines, the Indian lines and Sadr bazar lying N. of them Troops are no longer stationed here

The ruling family of Satara was descended from Sahu (the grandson of Sivaji), who was brought up at the Mughal court.

The Old Palace is the Judge's Court. The *New Palace*, near the centre of the city, was built for Appa Sahib (Raja Shahaji) between 1838 and 1844 by an English engineer, Mr Smith, who also built the bridges over the Verna and Krishna rivers. On the façade are several mythological pictures, much defaced by the weather. On the W side of the court is a hall (83 ft long, 45 ft broad). The roof is supported by sixty-four teak pillars, with four more in front. The buildings surrounding the front and main courts are occupied by Executive and Judicial offices.

About 200 yds beyond in a pretty garden and villa may be seen the crown jewels of the Satara family, Jai Bhawani, the famous sword of Sivaji, and his other arms. The sword is 3 ft 9 in long in the blade and the handle is 8 in. long, but so small that a European can hardly get his hand into it.[1] Like most of the famous blades in India, it is of European make, and has the stamp of Genoa. The Wâghnakh, or "tiger's claws," described on p 536, has rings which pass over the first and fourth fingers, but are too small for a European hand. The shield is of rhinoceros hide, and has four stars or bosses of diamonds. The gold casket for holding Sivaji's seal is ornamented with diamonds, rubies, pearls, and emeralds, and there is an inkstand and pen holder of gold and gems. The quilted coat which Sivaji is said to have worn when he murdered Afzal Khan may also be seen. It is only a cloak of thick quilted silk, which is inconsistent with the appearance of muslin. It is lined with red silk, is richly embroidered with gold, and is very heavy. The dagger is very handsome, and is 18 in long. In the handle are fine diamonds, emeralds, and rubies.

The **Historical Museum** (1930) contains a collection of documents and other relics of the Mahratta Empire which was made by the late Rao Bahadur D. B. Parasnis. The pictures belonging to the collection are kept at "Happy Vale," which belonged to the Rao Bahadur and includes some fine Mogul paintings. They can be seen upon application.

The **Fort of Wasota** on the S side of the town is accessible by a path. The stone gate is very strongly built, with buttresses 40 ft high. The interior contains a bungalow, one small temple, and the remains of the Raja's palace. The fort, taken by the British on 10th February 1818, is said to have been built by a Raja of Panhala who reigned in 1192.[1] By him, too, were erected the forts of Wairatgad and Pandavgad, near Wai, and Chandan-Wandan, near Satara.

History.—Long before the time of the 'Adil Shahi dynasty at Bijapur the Fort of Satara was used as a State prison, and Sivaji, who captured it in 1673, after a siege of several months, unwittingly furnished for his descendants a prison in which they were

[1] There are other weapons at Kolhapur and elsewhere which claim to be the original Bhawani sword. The balance of probability favours the Satara sword. A number of other relics of Sivaji are in the Bombay Museum (p 14).

[1] *Grant Duff*, 1, 26 (edition of 1921). The prince was Bhoj II (1178-93); he is said to have built fourteen other forts, including Pawangarh and Panhala (p. 540).

confined by the Peshwas from 1752. In 1698 Satara was made the capital of the Mahratta Government by Raja Ram, son of Sivaji and Regent

Aurangzeb, with a great army, in 1699 pitched his tents on the N side[1] His son, Prince Azam Shah, was on the W side, at a village since called Shahpur, Shirzi Khan invested the S, and Tarbiyat Khan occupied the E, quarter Chains of posts between the different camps effectually secured the blockade The fort was defended by Pryagji Prabhu, hawaldar, who had been reared in the service of Sivaji As the Mughals advanced he withdrew into the fort, and rolled down huge stones from the rock above, which did great execution The blockade, however, was complete, and the besieged must have been compelled to surrender had not Parshuram Trimbak, who had thrown himself into the Fort of Parali, purchased the connivance of 'Azam Shah, and replenished stores

The grand attack was directed against the N E angle, the rock being 42 ft high, with a bastion on the top of 25 ft of masonry Tarbiyat Khan undertook to mine this angle, and at the end of four and a half months had completed two mines The storming party, confident of success, was formed under the brow of the hill The Emperor moved out in grand procession to view the attack, and the garrison crowded to the rampart The first mine burst several fissures in the rock, and caused a great part of the masonry to fall inwards and crush many of the garrison; but the second and larger mine burst outwards and destroyed upwards of 2000 of the besiegers. Pryagji was buried by the first explosion close to a temple to Bhavani, but was dug out alive. This was regarded by the Mahrattas as a happy omen, and, animated by it, the garrison would have made a prolonged and desperate defence, but provisions fell short, and 'Azam Shah would no longer connive at their introduction Proposals of surrender were therefore made through him, and the honour of the capture, which he so ill-merited, was not only assigned to him, but the very name was changed by the Emperor to 'Azamtara

In 1705 the fort was retaken by the Mahrattas, through the artifice of a Brahman named Anaji Pant He ingratiated himself with the Mughals under the character of a mendicant devotee, amusing them with stories and songs, and, being allowed to reside in the fort, introduced a body of Mawalis, and put every man of the garrison to the sword

In 1818 Pratap Singh, eldest son of Shahu II, was installed as Raja He held the principality twenty-one years, but, being found guilty of conspiring to establish the dynasty, was sent prisoner to Benares in 1839, being succeeded by his brother, Appa Sahib (Shahaji) on whose death without issue, in 1848, the territory was annexed

Mahuli – This place, at the confluence of the *Krishna* and *Venna* (*Yena*) Rivers, is about 3 m. E of Satara It is considered a place of great sanctity, and the dead from Satara and the surrounding villages are brought there for cremation Descending the river, *Kshetra Mahuli* is the name of the village on the opposite (left) bank, built in 1825, and dedicated to Radha Shankar.

On the same side of the river is

[1] A pillar on the W of the village of Karanja, about 2½ m N E of Satara fort, and N. of the Poona-Satara Road, marks the site of the Emperor's camp

the temple of *Bholeswar Mahadev*, built in 1742. The next temple is on the same bank, dedicated to Rameswar, and was built in 1700 A.D., with a flight of steps leading up to it. Close to the junction of the rivers, on the W. bank of the Krishna and the N. of the Venna, is the Temple of *Sangameswar Mahadev*, built in 1679. Below it and at the junction of the rivers is a triangular plot of ground, with the *tombs* of a Gosain named *Banshapuri* and his disciples. That of the Gosain is an octagonal building of grey basalt, with open sides surmounted by a low dome. The largest temple, on the S. side of the Venna, at its confluence with the Krishna, is sacred to *Visheswar Mahadev*, and was built in 1735 A.D. A shivlinga marks the cremation of Sahu, when his widow committed sati, and there is a monument to his dog.

The fine bridge over the Krishna River below the confluence of the rivers, built by Mr Oddin Taylor of the P.W. Dept., was opened in 1915.

84 m. **Koregaon**, not to be confused with Corygaum (see p. 524).

160 m. **Miraj** junction station (R., D.B.). Terminus of the Barsi Light Ry. from Kurduwadi and Pandharpur (p. 527). Miraj is the centre of two small Mahratta States—Miraj (senior branch), of which the area is 342 sq. m., and Miraj (junior branch), which covers 196 sq. m. A short line of 6 m. connects Miraj with Sangli, the capital of another Mahratta State (1136 sq. m.).

A branch line, constructed by the Kolhapur State, runs W. to

30 m. **Kolhapur** ★ station (alt. 1849 ft.), capital (1731) of an important Mahratta State, which has a total area of about 3117 sq. m. It is celebrated on account of the antiquity of its temples, and is distinguished for its fine modern buildings.

The Maharaja traces his descent from Sivaji through Raja Ram, the younger son. His title of Chhatrapati (lord of the umbrella or paramount sovereign) was one of those which were assumed by Sivaji at his coronation (1674).

The *New Palace*, between the Residency and the city, was built at a cost of Rs.800,000. The *Albert Edward Hospital* was built in commemoration of King Edward VII.'s visit to India in 1875.

Opposite is the *Town Hall*, situated in the *Public Gardens*. The Rajaram College is near the Old Palace in the centre of the town, and fronting it is the *Kolhapur General Library*. The *Resident's House* is close to the *New Palace*. Close by is *All Saints' Church*, served by the S.P.G. clergy, whose *Mission House* is 300 yds. off. The *Irwin Agricultural Museum*, opened by Lord Irwin (November 1929), contains Andhra coins.

A *Nakkar Khana*, or music gallery, forms the entrance to the *Palace Square*. To the right on entering is the *Rajwada*, or *Old Palace*, with a stone gateway in the centre and wooden pillars. On the second storey is a Darbar-room, in which there is a picture of the cenotaph at Florence, erected over the spot where the body was cremated of Maharaja Rajaram I., who died there in 1870, while returning from England. In the third storey is an Armoury, in which are many curious swords, one of which may have belonged to Aurangzeb, for it has in Persian the name 'Alamgir and the date 1012 A.H. (1604 A.D.). There is

also a Persian sword given by Sir John Malcolm to Pratap Singh.

Adjoining the Treasury, in the S. face of the square, are other *Government Offices*, and behind them the shrine of *Amba Bai*, the tutelary deity of Kolhapur The old great bell of the temple, now in the Irwin museum, is inscribed "Ave Maria Gratiæ Plena Dominus Tecum," and must have been captured from the Portugese at Bassein (1739) It was replaced by one brought by H.H Shri Shaju Maharaj from England after attending the Coronation in 1902

N. of the town is a sacred spot, — the *Brahmapuri Hill* — where the Brahmans undergo cremation About 100 yds N of this, close to the Panchganga River, is what is called the *Rani's Garden*, where the bodies of the ruling family are cremated

From this spot is seen a *bridge* over the river, with five arches (1878) Beyond Rani's Garden is a massive stone gateway, 20 ft high, which leads to the *Cenotaph* of Raja Sambhaji (died 1760) just opposite the door, to that of Sivaji (d. 1721), and, more to the left, that of his mother, Tara-Bai, widow of Raja Ram

Ratnagiri (D.B) is 82 m from Kolhapur *viâ* the Ambaghat (1822) Thibaw, last King of Burma, was interned here (1886).

Hill Forts of **Panhala** *and* **Pawangarh.**—Before leaving Kolhapur the traveller should pay a visit to Panhala, which lies 12 m. N W. of the capital The last 5 m. are up a steep ascent There is an excellent road up the thousand feet into the fort.

Jotiba's Hill, close to the road, and also about 1000 ft high above the plain, is covered with temples (none of great age) Near the hill are the *Pawala Caves* (of Buddhistic origin, one large hall with fourteen pillars and an irregular *chaitya* cave) The road passes under the scarp of *Pawangarh* fort, which is about 1500 yds. from the E gate of Panhala The two main entrances were taken down when the fort was demolished in 1844

The fortress of **Panhala**, 2992 ft. above sea-level, is one of the most interesting in the W. of India It was the stronghold of a Raja Bhoj II in 1192 who reigned over the territory from the Mahadeo Hills, N of Satara, to the River Hiranyakeshi in Kolhapur State It was taken by the Kings of Bijapur, who restored it in 1549, was captured in 1659 by Sivaji, who made some of his most successful expeditions from it, and surrendered to the Mughals in 1690, but recovered 1707 In a rebellion of 1844 it was stormed and taken by the British.

At the *Char Darwaza* (quadruple gate) is a temple of Maruti; passing on, there is a Muslim tomb of granite on the left, and a temple of *Sambhaji*, also on the left The Sivaji Tower, or Sujja Kothi (A.D. 1600), is a building of two storeys, facing E and standing at the brink of a precipice About ½ m. S W. of the tower are stone granaries which enabled Sivaji to stand a siege of five months. They are 30 ft high, 57 ft broad, and 130 ft. long. At the W. side of the fort is the *Tin Darwaza*, a triple gate handsomely sculptured To the right, at about 40 yds. distance, is the place where the British breached and stormed the fort in 1844

180 m. The **Kistna** (or Krishna) river is crossed

213 m. **Gokak Road** station (R.) (conveyances available). 3½ m. from here are the falls of the Ghataprabha River, known as the **Gokak Falls** In the rainy season they are very fine The height of the falls is 176 ft., and the pool below is very deep. Near the falls, on both banks, are groups of old temples The Gokak cotton-mills overlook the falls, and are worked by turbines supplied with water from the falls. They are on the right bank of the river, which is crossed at this point by a suspension-bridge There are the remains of many dolmens S E of the village of Konur, 1 m. from the falls The Gokak Canal is fed by a reservoir formed by a dam at Dhupdal across the Ghataprabha River, and irrigates 30 sq miles

246 m **Belgaum** station (R., D.B.), called Shahpur Belgaum, from the neighbouring town of Shahpur, which lies to the S. It is situated in a plain 2520 ft above the sea. The fort stands to the E. of the town. It is built of stone and oval in shape It was taken by Khwaja Mahmud Gawan, Minister of Humayun the Cruel, of the Bahmani dynasty, in 1473. Brigadier-General, afterwards Sir J. T. Munro, took it on the 10th of April 1818 attacking from the N side

At 120 yds. distance is the ruined Nakkar Khana, or music gallery, and on the left is the fort *Church*, containing memorial tablets to C J Manson, C S., who was murdered near Nargund (p 584) by a band of rebels in the night of the 29th May 1858, and to Lieutenants W P Shakespeare and A P. Campbell, and Ensign W. Caldwell, who all fell in the insurrection of 1844 in the neighbouring States of Kolhapur and Sawantwadi.

Beyond the Nakkar Khana to the E. is a neat, plain mosque, known as the *Masjid-i-Sata* Over the entrance is an inscription in Persian with a date equivalent to 1519 A D , the year in which it was built by Azad Khan, a famous Bijapur captain and governor of Belgaum Farther S is a *Jain Temple*, built of laterite There is a low wall at the entrance, along which are carved figures of musicians The façade has four pillars and two pilasters, all of a very complicated character. An inscription in the old Kanara language, beautifully cut on a slab of black porphyry, in the Bombay Museum of the Royal Asiatic Society, states that Mallikarjuna, whose descent for three generations is given, built the temple

The *second Jain Temple* is within the Commissariat Store Yard. The roof is a most complicated piece of carving, rising in tiers, with eaves about 2 ft broad, which rest on bar-like corbels from the pillars The principal entrance faces the N W , and has one elephant remaining at the side, much mutilated , there is a quadruple pendant in the centre The niches are shell-shaped There are four portals, 7 ft sq each, and each with four black basalt pillars. There is no image Dr Burgess says: "The pillars of the temple are square and massive, but relieved by having all the principal facets, the triangles on the base and neck carved with floral ornamentations The door leading from the mandapam to the temple has been carved with uncommon care. On the centre of the lintel is a Tirthankar, and above the cornice are four squat human figures. On the neat colonnettes of the jambs are five bands with human groups, in some of which the figures are little more than an inch high, yet in high relief, inside this is a band of rampant *simhas* (lions), with a

sort of high frill round their necks. Outside the colonnettes is a band of *chahwas*, or sacred geese, another of *sinhas*, and then one of human figures, mostly on bended knees."

In *St Mary's Church* (1869) N.W. of the town, there is a Memorial Cross to twenty-three sergeants of H M 's 64th, who died during the Persian and Indian campaigns, 1856-8.

Shooting passes can be had from the Conservator of Forests, S.C., Dharwar, for the jungles in the S of Belgaum District and in the neighbouring District of N Kanara

The Bombay Bangalore road leads to Dharwar (47 m)

At Sutkatta, 14 m N from Belgaum, there are two Indian fig-trees of very great size The first is near the D.B The stem forms a wall of timber extending 40 ft , and rises to a great height , the branches spread out 100 ft round the trunk The other tree is about 1 m from the bungalow, and though not remarkable for height, covers a larger surface of ground.

277 m **Londa** junction (R.) The railway to Goa proceeds W. To the E. a line runs to Hubli Junction and Bezwada, at the head of the delta of the Krishna river. A third line goes S.E to Bangalore (Route 31)

On the line to Goa is

293 m **Castle Rock** station (R) (1907 ft) Here, at the frontier of the **Portuguese territory of Goa**, the S. Mahratta line is joined to the West of India Portuguese Railway (opened 1888), which in 51 m runs down the **Braganza Ghat** to **Mormugão**, the seaport of Goa. In the first 10 m the line passes through a dozen tunnels, ranging from 150 ft to 838 ft. in length. The grade is 1 in 40 The line runs through magnificent scenery.

307 m **Dudh Sagar** station, or the "sea of milk," where there is a very fine waterfall

325 m **Collem** Portuguese frontier offices

346 m **Margao** (Hotel dos Alliados), important town. Motor-bus (S) to Panjim, 25 m , or launch for Panjim may be boarded at Rachol, 5 m from Margao

360 m **Vasco da Gama** The old port and an important commercial centre ; quaint old-world vessels may be observed in the harbour

363 m The terminus of the railway is on the quay at the **Port of Mormugão**, which is the property of the West of India Portuguese Railway Company, leased to the M & S M Railway. From the stn a flight of stone steps leads to the Antico Palacio Hotel There is a fine view from the balcony over the bay towards the headland on the N , under which is Panjim, the capital of Portuguese India Alternative routes to Panjim and Goa are (1) Launch leaves Mormugão at 7 45 and 9 20 A M (15th Sept. to 31st May) for Dona Paula and Panjim . time, 1½ hr A motor-bus runs (taxis also) from Dona Paula to Panjim (2) Detrain at Sanvordem and take steamer through inland creeks *viâ* Old Goa to Panjim at noon Return *viâ* Mormugão. (3) Bombay Steam Navigation (Shepherd Co) steamer daily from Bombay to Panjim (time 21 hrs ; fare exclusive of food). The Indian Co-operative and Ratnagar Steam Navigation lines also run There is a British Consul at Mormugão, usually the railway engineer

New Goa, otherwise **Panjim** (two hotels). More than half the Indian population are Christian descendants of Hindus converted by the Jesuits and other religious orders. With Vasco da Gama (1524) there came to Goa members of the Portuguese nobility, whose descendants are still living in Goa. Panjim stands on the S bank of the Mandovi, which is navigable by steam launches as far as Sanvordem. The streets are broad and the squares are ornamented by statues.

A row of handsome buildings lines the quay, including the *Old Fort*, now the Secretariat and formerly the residence of the Governor-General, who removed hither from Old Goa about 1760, and in 1843 made this the seat of government. The present Government House contains portraits of Viceroys since 1520. To the S.W. is the *Palace of the Archbishop*, who is Primate of the Roman Catholic Church in India. It contains some life-sized portraits of the Archbishops.

To the W. are the *Barracks* of the small standing army and police. In front of them is a statue of Affonso d'Albuquerque (p. 546), the founder of Old Goa, brought from there.

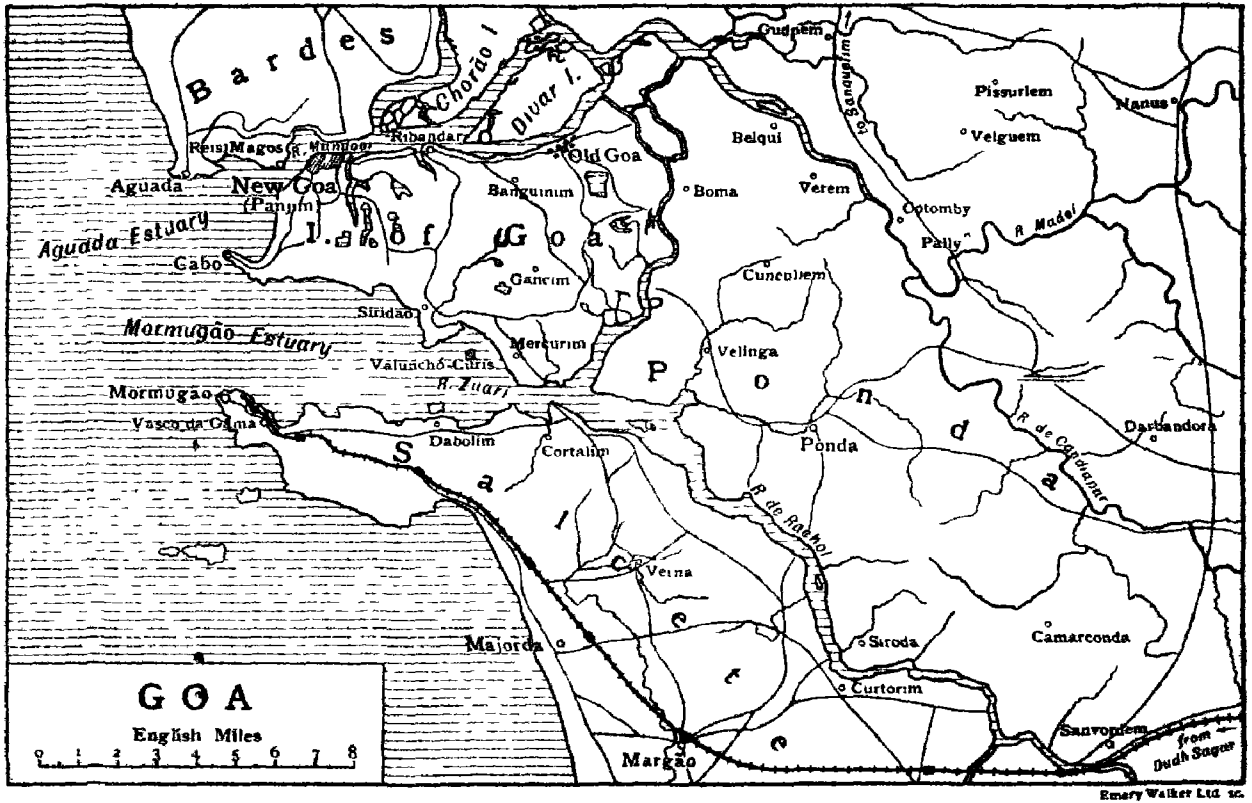
A good road leads from New to Old Goa about 5 m. higher up the valley (Motors available, Rs. 2½ return journey; 3 hrs. should be allowed, lunch to be taken.) The road first crosses a causeway thrown over the swamp to *Ribandar* village. From here cocoanut plantations and dwelling-houses line the way, which commands a fine view N. across the river to the hilly, wooded country beyond, and includes a conspicuous round hill, crowned by a Church and conventual buildings, upon the river-island of Divar. *En route* are passed the later Archiepiscopal Palace and the Fountain of Banguinim, which used to supply water to Old Goa.

Old Goa (Velha Goa, "Senhora de todo o Oriente," Camoens, 2, 51) owes its origin to Affonso d'Albuquerque, who at the head of twenty ships and 1200 troops carried by storm a small coast-town of the Bijapur State in 1510 A.D. On this site he founded the Christian city. It rose rapidly into prosperity and importance, and by 1565 became a very wealthy city (Goa dourada), the capital[1] and seat of Government of the then vast Portuguese territory, with a population of 200,000—ilha illustrissima de Goa (Camoens). Moreover, it was the first Christian colony in the Indies and the scene of the labours of St. Francis Xavier in 1542-52. But decay followed rapidly on the fall of Vijayanagar, with which a very profitable trade in horses was carried on. Its site proved pestilential, and it was deserted by its inhabitants. It is now literally a city of ruins, and the stranger approaches it unawares, and drives into the midst, unconscious that he is passing dwellings occupied by cocoanut and other trees instead of by human beings.

In the midst of all this ruin Goa remains a city of magnificent churches, four or five ranking as first class and in perfect preservation.

The road from Panjim leads past the Arsenal on the left and the hill of the Church of the Rosary on the right into a large central square, named the Pelourinho from the stocks in it, and surrounded by churches and con-

[1] Goa in its palmy state is admirably described by Captain Marryat in his *Phantom Ship* by C. Rechhoter in *A Wanderer's Log* (Mills & Boon, 1922); and by J. C. Molony in *A Book of South India* (Methuen, 1926). J. N. Fonseca's *Sketch of the City of Goa* (Bombay, 1878) is full of information.



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vents. The most important of these and the holiest, because it contains the body of St Francis Xavier, is the **Bom** (the Good) **Jesus**, on the right (S.) side, erected in 1594. Its handsome façade runs on into that of another great building with lofty halls and lengthy corridors, all empty, the *Convent of the Jesuits*, which was finished in 1590, thirty-eight years after the death of St Francis, and had the merit of rearing and sending forth over the world an admirable and devoted band of missionaries The order was suppressed here in 1759, the other monastic orders in 1835, when their property was confiscated to the State. The endowments of the churches, however, have not been forfeited, and the Archbishop and the secular clergy of Goa still receive allowances from Government

The **Church of Bom Jesus** may be entered by a side door from the Jesuits' College, passing the Sacristy Near it hangs a portrait of St Francis Xavier at the age of 44—a dark face of sweet expression

The Tomb and Shrine of St. Francis Xavier (1696) occupy a side chapel, richly adorned, the walls are lined with pictures illustrating some of the acts of his life He was in India (1542-7), went to Japan and died (1552), and was canonised (1622) by Pope Gregory XV

The monument consists of three tiers of sarcophagi, of jasper and marble, the gift of a Grand Duke of Tuscany The upper tier is ornamented with panels curiously wrought in coloured marbles so as to represent scenes in the life of the saint; the whole is surmounted by the silver coffin taped and sealed, and adorned with reliefs also in silver, and with figures of angels in the same metal supporting a cross. The coffin, weighing 600 marks of silver, is unlocked by three keys, in the keeping of the Governor-General, the Archbishop, and the Administrator of the Convent, and has been frequently opened, disclosing to public view the body, which was long in wonderful preservation, but has now shrunk to a mummy. The phalanx of one thumb is kept in a reliquary The body of the saint was translated here from the Sanchao's island, where it was originally buried.

In the body of the church is a solid silver statue of the saint

250 yds. distant, on the opposite side (N.) of the square, stands the **Cathedral** of St Catherine,[1] built in 1562-1623, the church next in importance to the Bom Jesus, and known as the Se Primaçial It is 250 ft. long, 180 ft. wide, with façade 116 ft high, with a high altar at the W. end. It alone of all the churches retains a staff of priests — twenty-eight canons — who perform the service throughout the year From the terraced roof of the cathedral solemn and terrible sights were seen in the square below, when the great bell of this church tolled to announce the celebration of an *auto-da-fé*.

N W of the cathedral is the *Archbishop's Palace*, a magnificent residence, still occupied occasionally.

W. of the cathedral is the once gorgeous *Church of* **San Francisco d'Assisi**, the oldest here, having been adapted from a mosque It was, however, rebuilt 1521, except the porch, which is original

In front of the cathedral stood the *Palace of the Inquisition*, with its dungeons and prisons, established in 1560 and suppressed in 1814, now an overgrown heap of ruins an acre in extent.

[1] Goa was recaptured on St Catherine's Day; 25th November

S. of the Inquisition, at the N.E. corner of the square, were the buildings of the **Misericordia**, enclosing the Church of Nossa Senhora de Serra, built by Albuquerque in fulfilment of a vow at sea, and in which he was originally buried. From these the Rua Direita led to the river front and the Viceroy's Palace. The **Arch of the Viceroys**, which still bears the deer crest of Vasco da Gama, stands over the principal landing-place known as the Ribeira dos Vicereys, which extended W. to the Quai of the Galleys (Ribeira dos Galés) and E. to the Customs House (Alfandega) and the Great Bazar. On the Arch is sculptured the figure of a saint, his foot is on the neck of the heathen and the sword in his right hand is pointing towards India. **The Palace** is a ruin.

E. of the Palace and the bazar and about ¼ m. N. of the Church of Bom Jesus, is the *Church of St Cajetan*, perhaps the best preserved, built 1665, and surmounted by a dome and by two low towers; the façade is of red laterite, whitewashed. The convent is now the *Museum*, where some curiosities of the olden time are preserved. Beyond lay the convent of the Dominicans, with that of the Carmelites on a hill, and the famous missionary **College of Saint Paul**, or Santa Fé, which is about ¼ m. E. from the Bom Jesus. The *autos-da-fé* used to take place in the Campo San Lazaro, near this. At the W. end of the town, near the Arsenal, was the famous **Royal Hospital**, founded by Albuquerque, the first established by Europeans in the East.

Portuguese India.—The territory of Goa has a coast-line of about 65 m., and includes the small island of Anjediva, near Karwar. It is divided into two tracts, known as the Old and New Conquests (Velhas e Novas Conquistas), and these are subdivided into four and seven subdistrict charges respectively, at the head of each of which is an Administrator and a Municipal Council. Damao (p. 166) is divided into two such charges, while Diu, an island off the S.E. coast of Kathiawar, constitutes one only; these two are under separate Governors subordinate to the Governor-General, who is also Governor of Goa. There is a High Court (Tribunal de Relacão) of second instance at Goa, consisting of five judges, which has jurisdiction over Macao and Timor as well as over the Portuguese possessions in India, and a subordinate judge in each "comarca" (judicial sub-district). Panjim has a Lyceum, a normal school, and a medical school, and primary schools exist in the Goa country.

The Padroado, or right of ecclesiastical patronage over the Roman Catholic dioceses in the whole of India, which was claimed by the Portuguese Government by virtue of a Bull of Pope Nicholas V. (2nd January 1454), has been abandoned under an arrangement entered into between the Vatican and Portugal in May 1928.

Affonso d'Albuquerque, the conqueror and founder of Goa, was born in 1453, and was therefore fifty years old when he visited Cochin and Quilon on his first journey to India in 1503. In 1506 he occupied Socotra on behalf of the Portuguese Crown, and in November 1509 he became Governor of the Eastern possessions. Panjim was taken from and retaken by Bijapur in 1510, but was recovered on 25th

November following. During the next two years Albuquerque was occupied with the affairs of Malacca; in 1513 he attempted to capture Aden, but failed, and in 1514 he caused a fort to be erected at Calicut after the Zamorin had been poisoned. In February 1515 he proceeded to Ormuz and obtained possession of the fort there, and died on his way back from that place to Goa on 18th December 1515. His body was finally transferred to Lisbon, and now rests there in the Church of Nossa Senhora da Graça [1]

From 1580 to 1640 Portugal was absorbed into Spain and in 1639 the Dutch tried to capture Goa.

By a Treaty of 1800 Goa was occupied by British troops, and again in 1808 on the invasion of Portugal by the French.

[1] See *Albuquerque*, by H. Morse Stephens (Oxford 1892) *Portugal in Quest of Prester John* by Elina Sanceau (Hutchinson).

ROUTE 28.

WADI JUNCTION to **Bidar, HYDERABAD, Golconda, Secunderabad, Kazipet** Junction, **Warangal, and Bezwada**

On the main line of the G.I.P. Ry. from Poona to Madras (Route 26) is

376 m. from Bombay, **Wadi** junction station (R.) (see p. 529), the western terminus of the broad-gauge section of H.E.H. the Nizam's State Railway, which runs to (115 m.) Hyderabad and thence to (338 m.) Bezwada, where it connects with the Madras and S. Mahratta main line from Calcutta to Madras (Route 25). This railway, as far as the Eastern frontier, was constructed by a Guaranteed Company (1874) and is now the property of the State.

10 m. from Wadi, **Chittapur** station. About 1 m. to the S. is **Nagai**, a deserted town, with ruined temples dating from 1050 A.D. In one of them is a life-size bull cut out of a solid block of basalt.

16 m. **Malkher Road** station for the old capital of Malkhed (2½ m.). Rashtrakuta Yatagiri (30 m. S.) was a Chalukhya capital until 1050 A.D.

24 m. **Seram** station. A richly-carved temple, of 1200 A.D., dedicated to Siva.

44 m. **Tandur** station (R.). Duck and snipe shooting in the cold weather.

57 m. **Dharur**. Railway bungalow, which can be occupied by permission of the Agent of the Ry., Secunderabad. The jungle to the S. of the line is a State forest reserve.

70 m. **Vikarabad** (R.; alt. 2057 ft); *jagir* (estate) of Nawab Vikar-ul-Umara (Minister 1893 to 1901). 3 m. from the stn., on the summit of one of the Ananthagiri hills, is a shrine with an image of Vishnu

Branch line, opened in Jan. 1930, to (57 m.) **Mohamadabad Bidar,** (108 m.) Udgir, and (168 m.) Purli Vaijnath (p 85)

Bidar (D B), Vidarba, was the capital, after 1428, of Bahmani Kings and then of the Barid Shahi dynasty (1492-1609) It was taken (1640) by Amir Jumla, vizir of Shah Jahan The fort (plan on sale), 6 m. in perimeter, was built in 1428 by Ahmad Shah Wali, the ninth Bahmani king, who moved here from Gulbarga (p 528)

The *madrasa* of Khwaja Mahmud Gawán[1] (built in 1471) has been partially restored The many-coloured encaustic tiles on the façade deserve notice The grave of Salabat Jang is in the enclosure of the tomb of Multani Pasha. The tombs of twelve Bahmani Kings are in the village of Ashtur to the N E of the town, including that of Humayun the Cruel, known as the Khuni Sultan (1458-1461) The tombs of the Barid Kings are W. of the town They are well preserved by the Archæological Dept of Hyderabad State.

The industry of Bidar, *Bidri* work, or *Tutanaig*, of silver and gold inlaid on iron, has been revived at the Government Industrial School

The Chalukyan capital of Kalyani is 36 m. N W of Bidar Hazar Khotri caves

81 m. **Bhalki** Fort and temple of Khandi Rao

[1] This Minister, who long upheld the Bahmani dynasty, was unjustly put to death in 1481 by Muhammad Shah III. This caused revolt and the break-up of the Kingdom

108 m. **Udgir.** Fort taken by Shahjahan, 1636. Battle and Treaty with the Mahrattas, 1760.

48 m. from Udgir and 25 m. from Nander (p 85), **Fort of Khandar Sharif** (2143 ft.)

145 m. **Pangaon** Temple

On the main line

80 m. **Gollaguda** Buddhist remains (2 m.)

88 m. **Shankarapalli**, waiting-rooms at the stn. 2 m. to the W. is the Rajampet State Stud Farm

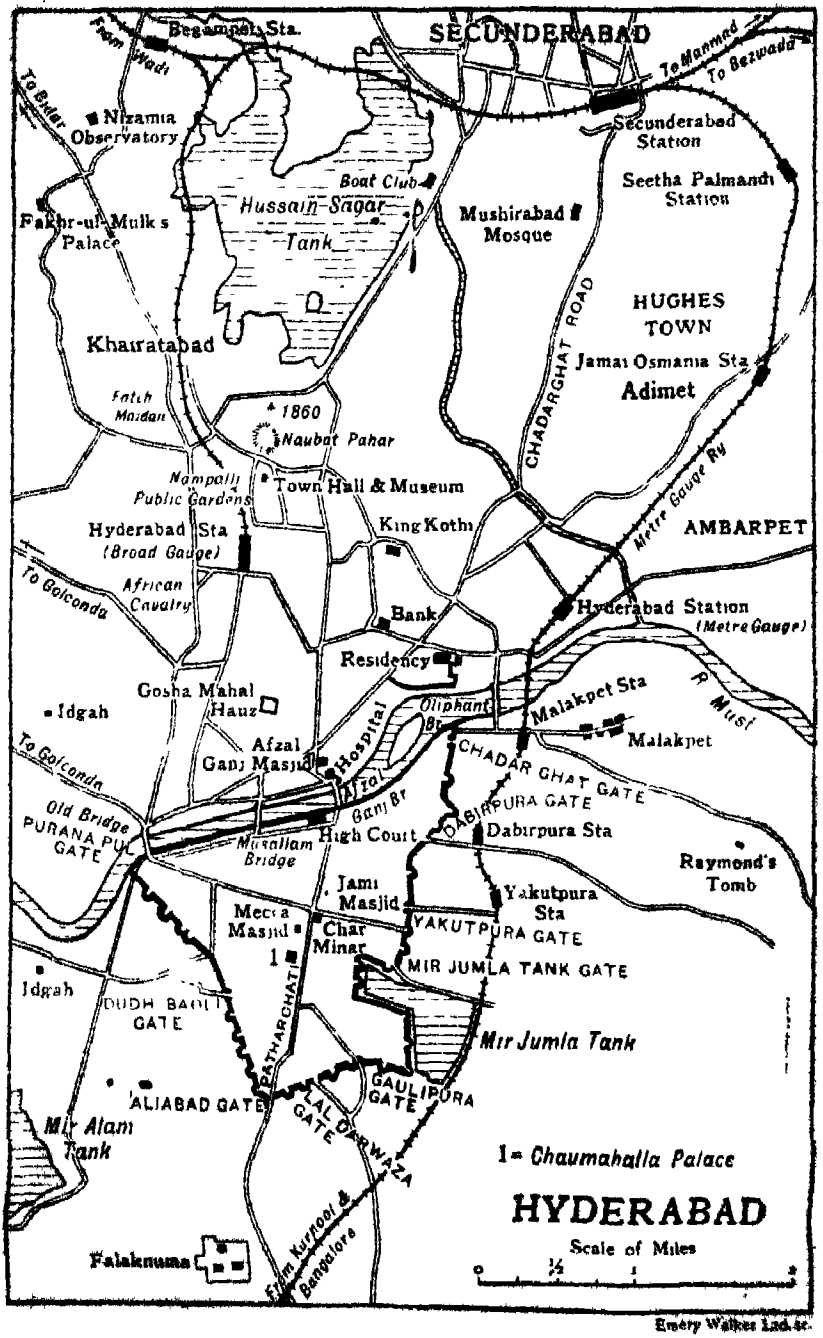
100 m. **Lingampalli** station (D B) Groups of underground temples are to be seen in the neighbourhood Small game shooting in the jungle also duck and snipe in the tanks (Permits from the Conservator of Forests at Hyderabad) Soon after this the country is dotted with outcrops, extending to Bhongir, 28 m. E of Hyderabad

5 m. to the N W of Lingampalli, on the road from Hyderabad to Bidar, is **Patancheru,** an important centre of Jain worship from the 7th to the 10th centuries A.D The temples have disappeared, but colossal statues of Mahavira have been found under mounds or below the Brahmanical constructions A Rural Reconstruction Centre established by H E H the Nizam's Govt is operating with great success

112 m. **Begampet** station (see p 558) The aerodrome on the Bombay-Madras run is here.

112½ m. **Husain Sagar** Junction (p 558). The line turns S along the Hussain Sagar and enters

115 m. **HYDERABAD** station * 1½ m. from the nearest city gate (Afzalganj). The metre-gauge station (pp. 553, 559) is 4 m. away from this, the broad-gauge station. The capital of H.E.H. the Nizam's territory (alt. 1776 ft.).



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The Hyderabad State has its own coinage; and, except at Hyderabad and Secunderabad stations, British Indian coins are not received at the rly stations in the Nizam's dominions The Osmania or Halli Sicca rupee, which is the unit, stands to the British rupee in the relation of 117 to 100, and is not current in British India.

The city of Hyderabad, which stands on the S bank of the Musi River (pop 739,159) was founded (as Bhagnagar) in 1589 by Muhammad Kuli, the fifth Kutb Shahi King of Golconda In 1687 Golconda (5 m to the W, see p 555) was taken by Aurangzeb, and a subadar governed the Deccan until the Nizam-ul-Mulk, Asaf Jah, defeated the Mughal Governor of Khandesh in 1724

The Hyderabad State covers 82,000 sq m The present Nizam, Lieut.-General His Exalted Highness Rustum-i-Dowran, Arastu-i-Zaman, Wal Mamalik, Faithful Ally, etc, Asif Jah, Nawab Mir Osman Alikhan Bahadur, Muzaffrul Mulk, Nizam-ul-Mulk, Sipah Salar, Fateh Jang, G C I E, G B E, Royal Victorian Chain (born 1886), succeeded his father, H.H. Sir Mahbub Ali Khan, in 1911, thus having ruled 25 years, in 1936 The title of "Exalted Highness" was conferred in 1918, and in 1936 Berar was added to his title, the heir-apparent being styled Prince of Berar, G C.I E, G.B.E.

The administration is carried on by a Council consisting of a President (Sadr-i-Azam) and six members in charge of departments with a Legislative Assembly (1939) increased in 1946 A written constitution defines the matters which require the personal orders of the Nizam.

The present Nizam is the seventh (three not being recognised) since the independent dynasty was founded in 1724 A D by Asaf Jah Nizam-ul-Mulk (Subadar in 1712) They are directly descended from Nizam Ali (1762-1803), who was the fourth son of Asaf Jah.[1] Other sons of Asaf Jah played a part in the rivalry of the French and English East India Companies in S India [2]

Formerly the inhabitants always carried weapons The practice is now confined to the old Arab mercenaries, who may still be seen occasionally in the streets with weapons stuck in their waist-cloths

The place maintains a considerable manufacture of textile fabrics, carpets, velvets for horse-trappings, and a material composed of cotton and silk Red earthenware is extensively made here

In shape the City is a trapezoid, and is surrounded by a stone wall, which was commenced by Mubariz Khan, the last Mughal governor, and completed by the Nizam-ul-Mulk The area is now 30 sq m., it has some remarkable buildings, which it owes principally to Sultan Muhammad Kuli, its founder (1581-1612) The *bazars* are

[1] Nasir Jang (d 1750), Muzaffar Jang, grandson (d. 1751), Salabat Jang (deposed 1761 and died at Bidar 1763), Nizam Ali (d 1803), Sikandar Jah (d 1829), Nasiruddaula (d 1857) and Afzal-ud-daula (d. 1869) The late Nizam succeeded in 1869 at the age of three Asaf Jah was the son of the first Ghazi-ud-din (p 296), Subadar of Berar, and the real conqueror of Golconda he died 1748 and is buried at Rauza (p. 74).

[2] The second Nizam owed his throne to the E India Company, and the third and fourth were French nominees Nizam Ali, the fifth, sided alternately with Haidar Ali and the English, but ultimately aided Lord Cornwallis in the first siege of Seringapatam in 1792

thronged with representatives of all parts of India. There is a City Improvement Board

On the N W. side are four *Gateways*—viz., on the extreme E. the Chadarghat Gate, next, to the W, the Delhi or Afzalganj Gate, then follow the Char Mahal, and the Old Bridge (Purana Pul) Gates in succession In the S W. side there is, first, the Dudh Baoli Gate, then the Fateh Darwaza and the 'Aliabad Gate, which is in the S.W corner On the S side are the Lal Darwaza and the Gaulipura Gate; and on the E are the Mir Jumla, Yakutpura, and Dabirpura Gates

The Musi River, on the N side, is crossed by four *Bridges*. Farthest to the E is the Oliphant Bridge, which was erected in 1831 by Colonel James Oliphant, of the Madras Engineers, afterwards (1844-56) a Director of the E. India Company and Chairman of the Court in 1854 The next bridge to the W is the Afzalganj Bridge, which leads to the broad-gauge railway station Upstream the Musallam (also called the Muslim Jang) Bridge, built in 1898 A.D by the late Nawab Laik-ud-daula, and the Old Bridge (Saak in 1777) were the only ones which withstood a terrible flood of 1908 The Char Mahal Gate is slightly to the N of the Musallam Bridge

The road from the broad-gauge railway station crosses the river by the Afzalganj Bridge and enters the city W of the Afzalganj Gate is the High Court The site of the Champa Gate, demolished in 1918, is marked by a few steps near the High Court. Facing these buildings, and on the N bank of the Musi, are the *River Gardens* and the *Osmania General Hospital*, built in the Indo-Saracenic style. Adjoining the hospital on the N is the *Afzalganj Masjid* (Mosque), a fine building with four lofty minarets. On the other side of the road is the *Victoria Zenana Hospital* for women, the foundation-stone of which was laid by H.M. Queen Mary, then Princess of Wales, in 1906. The establishment can be inspected by ladies only.

The *Osmania University*, formerly near the Afzal Gate, is now at Adikmet, about 6 m from the City It covers an area of 1500 acres The University, founded September 1918 and named after the present Nizam, employs the Urdu language as the medium of instruction, but a knowledge of English is compulsory. There are faculties in Arts, Science, Law, Theology, Medicine and Engineering, and degrees are conferred.

A broad street, known as *Patharghatt*, or the Stone Causeway, runs through the city from the Afzalganj Gate to the 'Aliabad Gate At the junction of four roads, and about ½ mile from the Afzalganj Gate, is a stately rectangular building with four minarets, hence called the **Char Minar**, 186 ft high and 100 ft. wide on each side; it was built in 1591 and is a masterpiece of the Kutb Shahi period. Just before reaching it the road passes under an arch called the *Machhli Kaman*, or "Arch of the Fish," the fish being a badge of high rank. There are four arches (*Char Kaman*) 50 ft. high across the streets, one to each quarter of the compass. W. of the Char Minar is the *Mecca Masjid*, the principal mosque in the city; the gateway was completed by Aurangzeb in 1692. It has four minars and five arches in front, occupying one side of the

paved quadrangle 360 ft. square—date, 1614 A.D. In the quadrangle are the graves of all the Nizams from the time of Nizam Ali (d. 1803). On the E. of the main road, a narrow lane leads to the *Jami Masjid*, erected in 1598 A.D. by Sultan Muhammad Kuli. The mosque is the oldest in Hyderabad.

The **Chaumahalla Palace** lies to the south of the Char Minar, 2½ m. from the Residency; from the Chauk a fine gateway leads to a large quadrangle. At the S.W. corner of this a narrow road leads into a second quadrangle, a passage from the S.W. corner of this leads into a third quadrangle, beyond which are the ladies' apartments (*zenana*). The buildings on each side resemble the Shah's Palace at Teheran.

In a side street 200 yds. beyond the Palace is the *baradari*, in which the well-known Maharaja Chandu Lal, who was Peshkar (Minister) from 1806 to 1843, died in 1843. It is a highly-ornamented Hindu house.

Near the W. wall of the city is the vast palace or *baradari* built by Nawab Tegh Jang, the first Shams-ul-umara, who died in 1786. It covers a large space, is handsomely furnished, and contains a gigantic suit of armour and sword belonging to Tegh Jang, whose stature is said to have been 6 ft. 6 in.

The *Jahannuma*, also built by the Shams-ul-umara, in a suburb of the same name outside the 'Aliabad Gate, is reached by a good road. This is the old Portuguese quarter of the city; services are still held in a chapel which dates from about 1800.

Near the Afzal Gate and a few hundred yards on the left is the *Palace of the late Sir Salar Jang*, G.C.S.I., whose able administration of the State lasted from 1853 to his death in 1883. The great drawing-room contains a number of portraits of former Residents and other distinguished personages. Close to it is the Chini Khana, about 14 ft. square and 12 ft. high, covered with china cemented to the walls. Within the same enclosure are Sir Salar Jang's *baradari* and *Lakkar Kot* (wooden palace). Across the road is the *Badshahi 'Ashur Khana*, which is well worth a visit. The original part of the building, which consists of a hall, was built by Muhammad Kuli Kutb Shah in 1597. The walls are adorned with Persian enamels, which are extremely rich in colour and compare favourably with the best work at Multan and Lahore.

In the N.E. quarter of the city, between the Yakutpura Gate and the Dabirpura Gate, is the **Purani Haveli**, or old Palace, which was built by Asif Jah, Nizam-ul-Mulk. On the road leading from the Chadar Ghat Gate to the Gaulipura Gate, about 200 yards to the N.W. is the *Dar-us-Shafa* or hospital, which was built by Sultan Kuli Kutb Shah, and consists of a paved quadrangular courtyard surrounded by chambers; it is no longer used as a hospital. Opposite the entrance is a mosque, which was erected at the same time.

The **Residency** can be approached from the city through the Chadar Ghat Gate and across the Oliphant Bridge. It stands about 1¼ m. S.W. of the broad-gauge stn., and N.E. of the city, in the suburb of Chadarghat, and is surrounded by the Sultan Bazar, over which H.E.H. the Nizam exercises jurisdiction since 1933, extending over an area of ¼ sq. m. The Residency grounds are spacious and full of grand old trees, and are enclosed by a wall, which was strengthened by Colonel Davidson after the attack upon the Residency on the morning of 17th July 1857. That attack was made by a band of

Rohillas and others, and was repelled by the troops at the Residency under Major Briggs, Military Secretary. The bastions commanding the approaches were erected then.

On the site of the Residency there was formerly a villa belonging to a favourite of Nizam 'Ali, and in it Sir John Kennaway, who was appointed Resident in 1788, was received. The present Residency was built 1803-8. The design was planned by Lieut. S. Russell, of the Madras Engineers, a son of John Russell, R.A., the artist (1744-1806).

The N. front (Grand Entrance) looks away from the Musi River. A flight of 22 wide granite steps, flanked on either side by a colossal lion, leads up to a portico, 60 ft. long, and 26 ft. broad. Six Corinthian columns support the roof. The Darbar Hall measures 60 ft. in length and 33 ft. in breadth, and is 50 ft. high; some of the furniture came from the Pavilion at Brighton. To the W. and E. are the private apartments. Among the trees are four enormous specimens of the *Ficus indica*, the trunk of one measuring 30 ft. round. There is also a very gigantic tamarind-tree. The park (which is not open to the public) contains an obelisk raised to the memory of Lieutenant William John Darby, who was killed in 1815 within the city of Hyderabad, while gallantly leading the Grenadiers in a charge against some rebels. In a small cemetery behind the Residency are the graves of four Residents—G. A. Bushby (1836), Major John Cameron (1838), A. A. Roberts (1868) and Sir Alexander Pinhey (1916), and also of Sir William Rumbold, Bart. (1833) and his brother George (1820), members of the firm of Palmer & Co., financiers of the State (1814-23).

Within the Sultan Bazar is the **Pestonji Kothi** (also known as the Kothi of Raja Narsingh Gir), a large building erected on a high stone basement by the famous Parsi bankers, Pestonji & Co., who farmed the revenues of Berar from 1839-45. Close to the Kothi are the Imperial Bank, the **King Kothi**, in which the present Nizam resides (not open to the public), and St George's School and Church. To the S.E. of the King Kothi is an old building, known as Rumbold's Kothi. On the roadside, not far from the Bank, is the remarkable tomb (built in Muslim style) of William Palmer (1867), who was styled "King" Palmer, and was the head of the banking firm bearing his name.[1] N. of the church are the *Nizam's College*, an institution which prepares for the degree examinations of Madras University, and the Roman Catholic Chapel, a two-storeyed building standing on the summit of a hill. Near the chapel is one of the old French gun-foundries erected by M. Raymond (p. 555). It is not unlike an immense racket court.

The metre-gauge railway station (for Bangalore) can be reached from the broad-gauge station by a road which runs E. past the King Kothi, and connects with the road which runs N. from the Old Bridge to Secunderabad station past the Afzalganj mosque. On the W. of this main road and about 1 m. S. of Secunderabad station is the *Mushirabad mosque*, a typical building of the Kutb Shahi style, with slender minarets and decorated with cut-plaster work.

To the S.W. of the city, standing on a hill, is the *Falaknuma Palace* of His Exalted Highness the Nizam. It was built as a private residence by the late Minister, Sir Vikar-ul-

[1] He was a son of General William Palmer, who was military secretary to Warren Hastings, and Bibi Faiz Bakhsh, a Begum of Oudh. His daughter married Col. Philip Meadows Taylor, C.S.I., the author of *The Confessions of a Thug*, who was in the Nizam's service.

umara, and was purchased in 1897 by the late Nizam. It is not open to the public, but application to view may be made to the Aide-de-camp in waiting, at the King Kothi. Passes are *not* obtainable through the Residency at Hyderabad. The approach is by a hill road.

The Palace stands on a terrace, the front of which is artistically laid out in flower-beds in the English style. The façade is Grecian, the cornice resting on a double row of Corinthian columns. The handsome vestibule, the walls of which are beautifully painted, is fitted with marble seats surrounding a marble fountain. The vestibule leads into the waiting-room, adjoining which are the Library and Council Chamber. The staircase to the upper floor is of marble, with beautifully-carved balustrades, supporting at intervals marble figures with candelabra. On the walls are oil paintings of His Exalted Highness the Nizam and past Residents and other notable personages of the State. The Reception-room is decorated and furnished in Louis XIV. style. The Ball-room, the Dining-room, the Smoking-room, and bedrooms are all artistically furnished. From the upper floor a fine view can be obtained of the city, the Mir 'Alam Tank, and the surrounding country.

There is no Jewel-house to be seen at Hyderabad, and enquiries at the Residency are therefore unnecessary.

Between the Purana Pul and Dudh Baoli Gates is a road leading W. out of the city, through the Khirki-i-Bawahir (a postern) to the *Mir 'Alam Tank*, a lake 8 m. round. The dam is formed of twenty-one arches, convex upstream. It is 1120 yds. long, and was built by French engineers. It was commenced by Mir 'Alam, the great Minister of the Nizam, who led his master's forces during the war with Tipu Sultan in 1799, the prize-money which fell to his share after the fall of Seringapatam being used for the construction. The embankment was completed in 1811 by his son-in-law, Munir-ul-Mulk (1809-32), the father of the first Sir Salar Jang. At the extreme W. end of the lake, on a wooded hill about 80 ft. high, is the *Dargah*, or shrine, of *Mir Mahmud*. This is a beautiful structure and well placed, looking down on the waters of the lake. It is symmetrical, and was once covered with blue tiles.

The *Gosha Mahal Hauz*, 1 m. to the N. of the city, is now dry and used for football matches and parades; the palace, completed (1685) by Abul Hasan, the last King of Golconda, and once residence of de Bussy, is used for public ceremonials; it contains some fine old armour.

To the N.W. of the broad-gauge railway station are the *Nampalli Public Gardens*, covering an extensive area, and surrounded by a high wall castellated with two lofty gateways. In addition to rare plants the *Gardens* contain an **Archæological Museum** (1931) with prehistoric objects from Paithan and Celadon ware, a menagerie and an Industrial Exhibition. The *Town Hall* commemorates the fortieth birthday (1906) of the late Nizam.

Outside the gardens to the N. is a picturesque Black Rock—the *Naubat Pahar* or "Band Rock"—so called because all communications of Mughal Emperors to subadars were proclaimed from

this rock to the sound of music. N. of the gardens is the Saifabad Cantonment of the Nizam's regular troops. On the *Fateh Maidan* are a race-course and a polo-ground The quarters of the Nizam's *African Cavalry Guards* are to the S W on the Golconda Road

EXCURSIONS FROM HYDERABAD

(1) The **Tomb of M. Raymond** (1755-98) is in Sarur Nagar (Pleasure Town), 2 m from the Oliphant Bridge to the E. of the city, and stands at the end of a terrace 180 ft long by 85 ft broad, on an eminence known as Myseram Tekri, or Monsieur Raymond's Hill The tomb consists of an obelisk of grey stone, 25 ft high, with the letters "J R" on each side. In front of the tomb is a small flat-roofed building, supported on a number of small pillars, and open at the sides He died on 25th March 1798

He had raised, since 1786, 15,000 good troops, and possessed more power than the British Resident On 20th October 1798, the whole force was disbanded as the result of a treaty concluded with the Nizam by the British Resident, Col James Achilles Kirkpatrick The tomb and platform are illuminated on the anniversary of Raymond's death, and a large fair is held. One of the regiments in the Nizam's service is still known as the Myseram Risala

(2) **GOLCONDA.** The **Fort** and **Tombs** lie 5 m. W. of the city. For permission to visit the fort application must be made in writing to the Political Secy to H.E.H. the Nizam's Govt, or to the Commander, H.E.H the Nizam's Regular Forces, or to the Captain of the Fort (Qiladar) Passes are granted in approved cases only, and in no case to large parties. The road from Hyderabad leaves the city by the Purana Pul Gate and crosses the Old Bridge

Golconda was the capital of the Kutb Shahi kingdom[1] (1507-1687), overthrown by the Emperor Aurangzeb. The **Fort**[2] is surrounded by a strongly built crenellated stone wall or curtain, a little over 3 m. in circumference, with eighty-seven bastions at the angles, on which there are still some of the old Kutb Shahi guns. The walls and bastions are built of solid blocks of granite, many of which weigh considerably over a ton. The moat is filled up in many places Of the original eight gates, only the Banjara and Fateh (by it Prince Muazzam entered, leading his troops), the Mecca and Jamali are now in use It was besieged (1650) by Aurangzeb, Viceroy of the Deccan, in treacherous concert with the Minister Mir Jumla, and was taken by him, as Emperor in 1687, after a desperate defence for a year by the last King, Abul Hasan, Abdur Razzak Khan Lari being the hero of the siege. When the Nizam ul-Mulk took possession (1724) he added a new wall to the fortifications on the E., so as to include a small hill formerly situated outside the fort. The large sheet of water in front of this portion of the fort is styled the *Langar Talao*.

The *Banjara Gate* is a massive structure of granite, some 50 ft. high, with platforms and chambers on either side for the guards, and a pair of high teakwood gates studded with iron wrought into various fanciful devices and huge

[1] This kingdom included all the country from Golconda in the west to the east sea-coast from Orissa to the Krishna. For a detailed account of it, see Major (now Sir Wolseley) Haig's *Historic Landmarks of the Deccan*

[2] See *Golconda Fort*, by Lieut. G. Muinuddin, 1925.

sharp-pointed iron spikes, intended to prevent elephants from battering them in. The road passes straight through the fort to the gate on the N.W. side A short distance from the gate is a large stone cistern said to have been built by Ibrahim Kutb Shah, which is connected with a tank some distance off by a line of underground pipes. The old buildings inside the Fort are used as the headquarters of the Golconda Brigade The Nau Mahal, built by Nizam Ali, stands in a garden of fruit trees

Beyond the Nau Mahal there is a lofty granite structure, said to have been used as a Nakkar Khana (Music Gallery), which forms the entrance to the first line of the Bala Hissar or citadel fortification A little to the right of this is the Jami Masjid, a small building the roof of which is supported on five rows of arches about 12 ft high. An Arabic inscription over the gateway states that it was erected by Sultan Kuli Kutb Shah (1512-43)

The Bala Hissar at the summit has several tiers of fortifications. Passing through the gateway, on the left side are the remains of the Sila-Khana (Armoury) and the Zenana palaces Parts of the old Water-wheels are still discernible, these rose in two tiers and were designed to bring the water from ground level to the top of the Armoury, which is on a crag, several hundred feet above The ascent to the summit is accomplished by a series of roughly paved steps. Half-way up is a large well and near by the ruins of the Ambar Khana, or King's Stores A slab of black basalt, which has fallen from its position over the entrance, contains a Persian inscription to the effect that the Ambar Khana was built during the reign of Abdullah Kutb Shah (1626-72). The N. portion of the ground was at one time most thickly populated, the ground inside the walls is said to have been so valuable that it used to sell for one ashrafi (Rs 20) per square yard. The E and S portions are strewn with ruins

Inside the Fateh Gate are two French arsenals. Farther on are the Qiladar's (Commandant's) House and the Mubariz-ud-daula Palace, and to the S. of these two large enclosures with underground galleries In front of the citadel, which rises finely some 350 ft above the rest of the fort, is a triumphal arch The paved path leads up through various gateways to the summit of the citadel, on which are the remains of a lofty palace, the two-storeyed Baradari, affording a splendid view of all the country round; on the roof is a stone throne. The upper storey has a spacious hall with side rooms and a large courtyard in front

The Kings' Tombs. About 600 yds. to the N.W of the fort stand on the plain the tombs of the Kutb Shahi Kings, reached by turning N from the entrance to the citadel and passing a stone tank to the N W corner of the fort The tombs were repaired at the instance of the first Sir Salar Jang, when the gardens which had formerly existed around some of them were replanted and the whole enclosed by a substantial stone wall. The tombs standing are those of: (1) Sultan Kuli Kutb Shah, 1512-43; (2) Jamshaid Kutb Shah, 1543-50; (3) Ibrahim Kutb Shah, 1550-80; (4) Princess Hayat Bakhsh Begam, daughter of (3),

1617; (5) Muhammad Kuli Kutb Shah, 1580-1612; and (6) Muhammad Kutb Shah, 1612-26, with minor tombs and mosques.

Muhammad Kuli Kutb Shah founded the city of Hyderabad, and erected many public edifices and Palaces, and his is the finest of the tombs, being 168 ft. high from the basement to the summit of the dome. Beyond this is the tomb of Ibrahim Kuli Kutb Shah, the fourth King, who died in 1580. To the S of it is the tomb of Sultan Muhammad Amin, King Ibrahim's youngest son, who died in 1595. A short distance from here in a N direction is the tomb of Kulsum Begam, and close to it is that of the first of the Kutb Shahi Kings, Sultan Kuli Kutb, murdered at the instigation of his son Jamshaid in 1543 at the age of ninety. Between the walled enclosure and the fort walls is the tomb of Abdulla Kutb Shah, who died in 1672, after a reign of forty-eight years, enriched with very fine carvings and minarets at each corner of the platform.

The last of the Kutb Shahi Kings, Abul Hasan, ended his days in the fortress of Daulatabad, 1704, and is the only one not interred here.

The general plan of the tombs at Golconda is a dome standing upon a square base, which is surrounded by an arcade of pointed arches. The arcade is single-storeyed in the case of the smaller tombs; in the larger tombs it is doubled. It rests upon a raised quadrangular terrace of cut stone, which is ascended by four flights of steps. The prevailing colour is white, in some cases picked out with green. Each large tomb has its mosque or musalla (chapel), usually a hall or a hall-porch opening eastward, with a *mihrab* to the west, and flanked by minarets on either side. The interiors are laid out with intersecting arches of great variety. Flights of stairs lead to the unbalconied galleries above, and down to the graves contained in the arches and alcoved basements. The tombs are of black basalt or greenstone. The shape is oblong and stepped with six or eight slabs diminishing above. The top is either *bombé* or flat, and the sides bear inscriptions in *Nashk* and *Nasta 'alik* characters (wrongly called Kufic). At one time the walls and cupolas of the principal tombs were decorated with glazed tiles; fragments of these can be traced.[1]

The return to Hyderabad may be made by the N. road, passing at 1 m. to the N.W. the *Baradari* and *Masjid of Bhagmati* (after whom Hyderabad was first called Bhagnagar), a favourite mistress of the Kutb Shahi King, Muhammad Kuli. On all sides rise outcrops of granite, gneiss, and low hills, taking from weather-wear the most fantastic shapes. The popular legend is that the Creator, after finishing the construction of the world, threw away the surplus material here.

The *diamonds* of Golconda, which have become proverbial, came principally from the S.E. frontier of the Nizam's territory (p. 501).

The Osman Sagar reservoir (16 m. W.) protects the city from floods, such as occurred in 1908, and supplies water. The Himayat-sagar reservoir (4 m. S. from the Osman Sagar) supplements the supply. There is a large dairy farm here. Another beauty spot in the Nizamabad District, nearly 100 miles away, but accessible by a good road, is the Nizam Sagar.

[1] For a full description, see the *Annual Report* for 1926-27 of Mr G. Yazdani, Director of Archæology, Hyderabad State.

on the Manjru river, irrigating land under sugar cane

On leaving Hyderabad (broad-gauge) station, the train returns to Husain Sagar junction (p. 548) and, turning to the E past the N edge of the Husain Sagar tank, enters

121 m. from Wadi Jn., **Secunderabad** junction (R.), * 5½ m. N. of the Hyderabad Residency. Secunderabad is named after the Nizam Sikandar Jah (1803-29). It is one of the largest Cantonments in India, covering 19 sq. m. and standing 1830 ft. above sea-level. Excellent roads connect Hyderabad, Secunderabad and Bolarum.

The main road from Hyderabad to Secunderabad passes along the E. edge of the *Husain Sagar*, a fine lake about 11 m. in circumference, said to have been constructed by Ibrahim Kutb Shah (1550-80). The principal feeder is a channel 36 m. long, which runs from the Musi River above Hyderabad. The view across the Husain Sagar from this main road, which is built on the bund (1 m. long), is most picturesque. At the N. or Secunderabad end of the bund is a *Boat Club*.

On the S. bank is the Saifabad Palace, formerly used as a suburban residence of H.E.H. the Nizam, but now utilised for the Mint and the Finance, Public Works and Political Departments. This building opens on the Saifabad Road by an elaborate and imposing iron gateway. S. of this is the Fateh Maidan (p. 555).

Another road, running along the W. bank of the Husain Sagar Lake, passes through the popular suburb of Khairatabad, where most of the State officials reside, and leaving the Bidar Road just past the residence of the Nawab Fakhr-ul-mulk on a hill to the W., skirts the W. bank of the lake, rising to a height of over 20 ft. above the water. The Observatory, astronomical and meteorological, is on the W. At the point where the road crosses the Hyderabad Wadi line of railway, is situated the station of Begampet. Passing over two Warren girder bridges, the road turns E. and descends nearly to the level of the lake, rising again as it approaches Secunderabad. The Begampet lines lie to the N., and on the S. a block of buildings, surrounded by a wall, marks the palace of a former Minister, Sir Vikar-ul-umara (1893-1901). The road then enters the Secunderabad Cantonment, which comprises the areas of Chilkalguda, Bowenpalli, Begampet, Trimalgiri, N. Trimalgiri and Bolarum. To the E. of the junction station is Lallaguda, the railway colony.

The Brigade *Parade-ground* at Secunderabad is used almost entirely for ceremonial purposes. There are several fine buildings in the Cantonment, including the King Edward VII. Memorial Hospital (with 225 beds); the United Service Club stands out as a landmark for miles around. The two hotels are on the Maidan, close to the railway station.

At **Trimalgiri** (Trimulgherry), 3 m. N.E. of Secunderabad, is an entrenched camp surrounded by a stone ditch. The *Military Prison*, which stands due W. of the S.W. bastion of the entrenchment, is popularly called Windsor Castle, from its high tower and castellated look. The *Station Hospital* is due S. of the S.E. bastion.

Bolarum, 6 m. N. of Secunderabad, and now incorporated with it, was formerly the principal Can-

tonment of the Hyderabad Contingent Force, which has since 1903 been absorbed into the Indian Army. Here also is a Country Residency, occupied by the Resident and his staff, when Bolarum is cooler than Hyderabad Frequent bus service.

From Secunderabad the Hyderabad Godavari Valley Ry. (opened 1900) runs to Aurangabad and Manmad (Route 4). Bolarum is a station on this line Another metre-gauge line (opened 1928) runs S and connects with the Madras and S Mahratta Rly at Kurnool (Route 30, p 579), direct train service between Secunderabad and Bangalore by this line, which passes through Hyderabad station.

From Secunderabad the line to Bezwada runs E

149 m from Wadi Jn. is **Bhongir** (Bhongir) (R), celebrated for its pottery Prehistoric remains have been found at the foot of a fortified rock, on which are the ruins of a palace.

153 m. At **Raigir** there are prehistoric cairns

202 m. **Kazipet** Jn. (R.) for the railway to Chanda (p 135). 4 m from this station is **Hanamkonda**, with a remarkable temple (*c.* 1163) Never finished and ruined by an earthquake, it is still a fine specimen of the Chalukyan style. In front of the triapsidal temple was a splendid Hall of Columns; both of these are placed on high basements, and both contain numbers of elaborately decorated pillars of very hard dark stone, with pierced screens between those in the outer rows. It is dedicated to Rudra, God of Thunder, with an inscription of Pratapa Rudra of Warangal.

A road to Chanda runs 16 m. past the Jail (worth a visit for its carpet-weaving) to **Warangal** (p. 560). There is a motor-bus service. The station-master at Kazipet, if advised in advance, will arrange for a car, provisions must be taken

At Palampet, on the shores of Ramappa Lake, 40 m. N.E. of Hanamkonda, are some temples which have been described[1] as "the brightest stars in the galaxy of mediæval Deccan temples" The road is suitable for motors There is a P W D. bungalow (permit from Divl Engr, Warangal) at Mulag (motor-bus service, 33 m from Kazipet), 12 m. from Ramappa, a noted centre for big game.

A broad-gauge line of railway, crossing the Godavari River at 63 m. by a bridge 3820 ft. long (1927), the Painganga, and the Wardha River at 142 m., runs from Kazipet to (146 m) Balharshah (p 135), where it connects with the G.I P Railway line to Chanda and Nagpur. The Grand Trunk Express runs daily between Madras (p. 604) and Delhi, *viâ* Bezwada, Kazipet, Chanda, Nagpur and Itarsi (Route 9) This route is 200 m. shorter than the former route *viâ* Manmad

m 8 Hasanparthi Road has a temple of Venkateshwar Swami A religious fair is held annually. Iron ore is found in the vicinity and small quantities of iron and steel which are manufactured here are employed for agricultural implements

m 23. **Jumalkounta.** In the centre of a village is a pillar

[1] *The Temples of Palampet*, by G. Yazdani, Dir. of Archæology, Hyderabad State (No. 6, *Memoirs, Arch. Survey of India*, Calcutta, 1922).

bearing an inscription in Ooriya which has not been deciphered. At Ellondasoonta, 2½ m. E., there is a temple dedicated to Rama where an annual fair is held

m. 47 **Pedapalli** (D.B.) A Jagir. There is a motor-bus service (S) from Pedapalli station to Karimnagar (47 m.) noted for its silver filigree work. During solar and lunar eclipses pilgrims visit the bathing ghats of the Godavari River, which is 6 m. distant. There is a quarry in Ramayana where good stone is available

m. 79 **Belampalli.** A coal-field has been opened in the vicinity of this station

m. 94 **Asifabad Road** 12 m. from the town of Asifabad (D.B.) There is a famous Hindu temple near by with a frieze containing some sex symbolism

m. 114. **Sirpur.** The first Gond King, Bhima Ballal Singh, made Sirpur his capital about 1240 A.D. In the reign of the seventh Gond King, Dirken Singh, Sirpur flourished as a great literary centre

m. 140 **Manickgarh.** The ancient fortress of Manickgarh was a principal fortress of the Gond Kings

Main line,

208 m. **Warangal** stn. (D.B.K.) ½ m. from the station, visible thence only as a long line of earthworks, stands the noted Hindu fort city of Warangal (Orakkal, "solitary rock"). It was the ancient capital of the Kakatiya, or Ganpati, dynasty, which was attacked by Malik Kafur in 1309 and captured by Muhammad Tughlaq in 1323, from Pratapa Rudradeva II., the last Raja. Bukka Raya of Vijayanagar retook it. The Bahmani King, Ahmad Wali I., conquered it in 1424.

In the fort four Kirthi Stambhas were apparently openings to a square, and (like the Sanchi gateways) reproduce wooden forms, the side struts being specially remarkable. There is also a small half-ruined temple with some capital figures of bulls in front of it. The fine hall and other buildings belong to the Muslim period.

The line to Bezwada turns sharply S.E. to

216 m. Chintapalli. 26 m. E. on the dam of the Pakhal tank is a pillar

261 m. **Dornakal** junction station (R.). See of the first Indian Anglican Bishop Azariah (consecrated 1912, died 1946). The Cathedral was built by Indian Christians in their own style.

Branch to Singareni Collieries (16 m.) of the Deccan Mining Company, which supplies S. India, with rich beds of iron ore.

From (10 m.) Karepalli Junction on the Singareni branch a line runs (30 m.) to **Bhadrachalam Road**, which is the station for the famous Temple of **Bhadrachalam** (D.B.) 20 m. Public motor-bus service to Borgham Pahar, on the S. bank of the Godavari, where the river is crossed, the ferry-boats land visitors within a few yards of the temple which is in British territory. Rama is said to have crossed the Godavari near this spot on his journey to Lanka (Ceylon) in search of his wife, Sita; and his house is shown to Hindus. The wealth of the temple, which is surrounded by twenty-four smaller shrines, is very great.

Main line.

275 m. Khammameth (D.B.), fort accessible by motor-bus from Hyderabad

303 m. Madhra In this taluk, formerly the S. taluk of Warangal, the Koh-i-nur diamond was found (1623) near Kollur, on a hillside near the Krishna river At Partial the Regent diamond was found, bought by Thomas Pitt, President of Madras (1701) and sold to the Duc d'Orléans, Regent of France, for a great sum It was cut from 410 carats to 137 carats

313 m **Venupalaiyam**, is the last station in the Nizam's Dominions.

328 m. **Kondapalli** station Ruins of a once celebrated fortress, built in 1360 A D It was taken by the Bahmani king, Humayun the Cruel, in 1458, and changed hands several times. The old palace of the Kutb Shahi kings stands on an elevation above the valley, part of it has been adapted as a R.H It was taken by the Emperor Aurangzeb in 1687, and by the British, under General Caillaud, in 1760. Panthers abound in the neighbouring hills Kondapalli is noted for its manufacture of wooden toy models of bungalows, with furniture and crockery complete.

338 m. **Bezwada**, or Krishna, station (*R.*, *D.B.*) (see p. 509), on the main line between Madras and Calcutta (Route 25).

ROUTE 29.

HOTGI JUNCTION to **BIJAPUR**, **Caves** and **Temples** of **Badami**, and **Gadag** Junction.

292 m from Bombay, on the G.I P Ry main line from Bombay to Madras (Route 26), and 10 m S E of Sholapur junction (p. 527) is

Hotgi (Hudgi) junction (R.). A metre-gauge line (opened 1884) of the Madras and S. Mahratta Ry. runs S (174 m.) to Gadag, where it connects with the line from Hubli to Guntakal junction (Route 30).

At 16 m., between the first and second stations, the Bhima River is crossed by a bridge 2342 ft long (1884). From **Minchnal** (47 m.) the domes and minarets of Bijapur are plainly seen to the S.

58 m **BIJAPUR**[1] stn., otherwise *Vijayapura*, "City of Victory" (*R.*, *D.B.*). The railway station is E. of the city and close to the Gol Gumbaz, the great tomb of Muhammad 'Adil Shah

Yusaf Khan, the first King of Bijapur on the decay of the Bahmani dynasty, was a son of Amurath II, of Anatolia, and a Turk of pure blood, whose mother was forced to send him from Constantinople to Alexandria as an infant. He reached India (1459), was purchased for the bodyguard at Bidar (p. 548) by Mahmud Gawan, became governor of Bijapur, and in 1489 was enabled

[1] See *Bijapur: A Guide to its Ruins, with Historical Outline*, by H Cousens (Poona, 1889). Also *Architectural Antiquities of Western India*, pp. 70-81, by H. Cousens (India Society, London, 1926).

to proclaim independence and to found the 'Adil Shahi dynasty of Bijapur. The following is the order of their accession —

		A.D.
Yusaf Khan,	'Adil Shah	1490
Ismail	,,	1510
Mallu	,,	1534
Ibrahim I	,,	1535
'Ali I	,,	1557
Ibrahim II.	,,	1580
Muhammad	,,	1626
'Ali II	,,	1656
Sikandar	,, 1659 to	1686

in which year the city was taken by Aurangzeb

A great architectural outburst followed on the capture and spoil of Vijayanagar (p. 575) after the Battle of Talikota in 1565. The kingdom extended to the west coast, including Goa.

The Kaladgi (Mahratta, W of Bagalkot) District was re-named Bijapur in 1883, when Government re-occupied the old capital as administrative headquarters A number of the buildings at Bijapur have been taken into official use, thereby saving them from destruction

Torwah, or Nauraspur, about 1616 A.D was a great suburb; but by 1686 it was "quite depopulated, its ruined Palaces only remaining, with a thick wall surrounding it, whose stately gateways were falling to decay." This suburb, then, whose walls extended 3 m. from the W. gate of the fort, and probably other suburbs, must have been included in the 30 m. circuit which tradition ascribes to Bijapur. What is called the city now is the fort only, of which Grant Duff says it was 6 m. in circumference. Within the circuit is the citadel, with walls extending 1650 ft. from N. to S. and 1900 ft. from W. to E. The buildings give proof of the former riches and magnificence of this old capital. Two days will not be too much to devote to the principal buildings alone.

The Gates of the fort or city are :—

The Fateh Gate, in the centre of the S. wall of the city, by which Aurangzeb is said to have entered

The Shahpur Gate, on the N.W. The gate itself is furnished with long iron spikes on the outside, to protect it from being battered in by elephants This was a common device throughout India.

On the W of the city, is the

Zohrapur = Jorapur Gate, and 600 ft. to the S of that is the

Makka Gate, with representations on either side of lions trampling on an elephant. This gate is closed and converted into a school. A less imposing one, a few hundred yds farther N., serves its purpose Almost exactly opposite to it, on the E. side of the city, is the

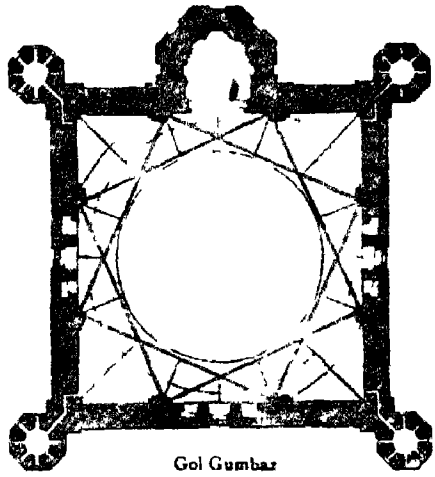
'Alipur Gate, or High Gate, wrongly called in maps and elsewhere the Allahpur Gate. N. of it is the

Padshahpur Gate, near the railway station.

In the centre of the N wall is the Bahmani Gate

The *Mausoleum of Muhammad 'Adil Shah*, seventh King (1626-1656), is called Gol Gumbaz, or "Round Dome" (1)[1] Fergusson, in his *Hist. of Ind. Arch.* (2, 273), says of this building: "The tomb of Muhammad was in design as complete a contrast to that of Ibrahim II" (see p. 568) "as can well be imagined, and is as remarkable for simple grandeur and constructive boldness as that of Ibrahim was for excessive rich-

[1] The numbers refer to the corresponding numbers on the plan of Bijapur (p. 570).



Gol Gumbaz

Section of Domes, Jam Masjid

ness and contempt of constructive properties. It is constructed on the same principle as that employed in the design of the dome of the great mosque, but on so much larger a scale as to convert into a wonder of constructive skill what, in that instance, was only an elegant architectural design." It is built on a platform 600 ft. square and 2 ft. high. In front is a great gateway, 94 ft. by 88 ft., with a Nakkar Khana (music gallery), now a museum (1912).

The tomb is square, with sides of 196 ft. (exterior), and at each corner is a tower, seven storeys high. In the centre is the great dome, 124 ft. in diameter, while that of St Peter's at Rome is 139 ft., and that of St Paul's in London 108 ft. Over the entrance are three inscriptions: "Sultan Muhammad, inhabitant of Paradise", "Muhammad, whose end was commendable"; "Muhammad became a particle of heaven (ht. House of Salvation), 1067." The derived date, thus three times repeated, is 1059 A.D.

The surface for the most part is covered with plaster. Three façades have a wide, lofty arch in the centre, pierced with small windows and a blind one on either side, and above each is a cornice of grey basalt and a row of small arches supporting a second line of plain work, surmounted by a balustrade 6 ft. high.

The corner towers are entered from winding staircases in the walls of the main building, and terminate in cupolas. Each storey has seven small arched windows opening into the court below. From the eighth storey there is an entrance to a broad gallery inside the dome, which is so wide that a carriage might pass round it. Here there is a most remarkable echo, a soft whisper at one point of the gallery can be heard most distinctly at the opposite point.

The great hall, over which the dome is raised, is the largest domed space in the world. The internal area is 18,225 sq. ft., while that of the Pantheon at Rome is only 15,833. "At the height of 57 ft. from the floor-line," says Fergusson (*Hist. of Ind. Arch.*, 2, 274), "the hall begins to contract by a series of pendentives as ingenious as they are beautiful,[1] to a circular opening 97 ft. in diameter. On the platform of these pendentives, at a height of 109 ft. 6 in., the dome is erected, 124 ft. 5 in. in diameter, thus leaving a gallery more than 12 ft. wide all round the interior. Internally the dome is 178 ft. above the floor, and externally 198 ft. from the outside platform; its thickness at the springing is about 10 ft., and at the crown 9 ft."

From the gallery outside a view shows, on the E., 'Alipur; on the W. are seen the Ibrahim Rauza, the Upari Burj, the Sherza Burj, or Lion Bastion; to the N.W. is the unfinished tomb of 'Ali 'Adil Shah II., about 1 m. towards the N. the ruins of the villages of the masons and painters employed on the Gol Gumbaz, and on the S.W. is the dome of the Jami Masjid.

A small annexe to the mausoleum on the N. was built by Sultan Muhammad as a tomb, it is supposed, for his mother, Zohra Sahiba, from whom one of the suburbs was called Zohrapur.

[1] "The most ingenious and novel part of the construction is the mode in which its lateral and outward thrust is counteracted. This was accomplished by forming the pendentives so that they not only cut off the angles, but that, as shown in the plan, their arches intersect one another and form a very considerable mass of masonry perfectly stable in itself, and, by its weight acting inwards, counteracting any thrust that can possibly be brought to bear upon it by the pressure of the dome."—Fergusson, *Ind. Arch.*, 2, 274.

now called Jorapur. It was never finished or occupied.

Below the dome is the cenotaph of Sultan Muhammad in the centre. On the E. side are the graves of his youngest wife and of the son of 'Ali 'Adil Shah II., on the W. are those of his favourite Hindu mistress, a dancing girl Rambha, his daughter, and his eldest wife, mentioned by Bernier.

On the edge of the platform W. is the mosque attached to the mausoleum, a building of no mean size and of considerable beauty of design, but quite eclipsed by the size of the Gol Gumbaz.

The museum of Bijapur antiquities in the Nakkar Khana (p. 564), should be visited. The exhibits include some of the famous Bijapur carpets.

The road to the dak bungalow (over a mile) passes the Mahal of Khawas Khan and Mosque of Mustafa Khan, a lofty building with a façade of three arches and a central dome supported on pendentives. Behind the mosque W. are the ruins of the Khan's Palace. Mustafa Khan Ardistani was a distinguished nobleman at the court of 'Ali 'Adil Shah I., and was murdered in 1581 A.D. by Kishwar Khan, who usurped the regency in the time of Ibrahim 'Adil Shah II.

The **Jami Masjid**, nearly ½ m. S.W. of the Gol Gumbaz, is entered by a gateway on the E. side. The surrounding wall was never completed on the E. The arcades on the N. and S. sides are 31 ft. broad. In the centre of the quadrangle is the *hauz* or tank for ablutions, now dry.

It was commenced by 'Ali 'Adil Shah I. (1557-79), and, though continued by his successors, was not finished by 1686. The mosque proper has a façade of nine bays, and is five bays in depth. Each square has a domed roof, beautiful, but so flat as to be concealed externally. The centre, a space 70 ft. square, corresponding to twelve of these squares, is roofed over by the great dome, which is 57 ft. in diameter. It is supported on pendentives in the same manner as the Gol Gumbaz. The pavement below the dome is of chunam, divided by black lines into numerous squares called *musallahs*, or compartments for persons to pray on, imitating the *musallah*, or prayer-carpet, which the faithful carry with them to the mosques. These were made by order of Aurangzeb when he carried away the velvet carpets, the large golden chain, and other valuables belonging to the mosque.

The mihrab, which marks the place on the W. to which the people turn in prayer, is gilded and ornamented with much Arabic writing. There is also a Persian quatrain. The derived date is 1636 A.D.

The **Mihtari Mahal** (2) is the name given to the entrance gateway to the Mihtari Mosque, a building of minor importance. It stands between the Jami Masjid and the citadel, on the S. of the road. It is a small but elegant structure, three storeys high, with minarets at the corners and ornamental carving in soft stone about its balconied and projecting windows. Fergusson says (2, 278) of this structure: "One of the most remarkable edifices is a little gateway, known as the Mihtari Mahal. It is in the Hindu-Saracenic style, every part and every detail covered with ornament, but always equally appropriate and elegant. Of its class it is perhaps the best example in the country, though this class may not be the highest."

The Palace of the **Asar-i-Sharif** (3), "illustrious relics," which are hairs of the Prophet's beard, is a large heavy-looking building of

brick and lime, standing outside the moat of the inner citadel and the centre of its E. rampart. The E. side is entirely open from the ground to the ceiling, which is supported by four massive teak pillars, 60 ft. high. This forms a deep portico 36 ft. broad, and looks upon a tank 250 ft. square. The ceiling of the veranda or portico is panelled in wood and has been very handsomely painted. The whole of the W. side is occupied by rooms in two storeys. A flight of stairs ascends to a hall 81 ft. long and 27 ft. broad, where some of the old carpets and brocades of the Palace are shown *under glass*. *Opening right from* this hall is an upper veranda or ante-chamber which looks down into the portico (already described) below. Its ceilings and walls have been gilded, the doors are inlaid with ivory, and in the palmy days of Bijapur the effect must have been very striking. The **Asár-i-Sharif** formerly communicated with the citadel (W.) by a bridge. Originally built as a court of justice by Muhammad Shah about 1646, it succeeded to the honour of holding the precious relics of the Prophet after a similar building within the citadel had been burned down.

The Arkilla or Citadel.

The only gateway that remains is at the extreme S., facing E.; here the walls are full of ancient pillars and sculptured stones, taken from Jain temples, and others were utilised in the two "old mosques" within the citadel.

The **Old Mosque** (4), just N.W. *of the gate, is a converted Jain* temple. The central mandapam, or hall, two storeys high, serves as the porch. The inner doorway, with perforated screens, is Muslim, but the mosque proper is made up of Hindu or Jain pillars of various patterns and heights. At the N. side, near the centre row, is a carved black pillar, and to the N.E. of it an ancient Kanarese inscription. On several of the pillars around are inscriptions, some in Sanskrit and some in Kanarese. One bears the date 1320 A.D.

The **Anand Mahal** (5), or "Palace of Delight," where the ladies of the seraglio lived, is in the centre of the citadel. It was built by Ibrahim II. in 1589, and intended partly for his own use, but the façade was never finished. It contains a very fine hall, and is used as an official residence. The Station Club is also located here.

The **Gagan Mahal** (6), or (sky) "*Heavenly Palace*," supposed to have been built by 'Ali 'Adil Shah I., is on the W. of the citadel close to the moat, and faces N. It has *three magnificent arches*. The span of the central one is 61 ft., and that of each of the side arches *18 ft.* The height of all three is the same—about 50 ft. It was used as a darbar hall, and on the roof was a gallery, from which the ladies could see what occurred on the open space in front. It is said that here the Emperor Aurangzeb received the submission of the King and the nobles on the fall of Bijapur.

An old gateway of the Palace to the S.E. of the Gagan Mahal has been converted into the **Station Church** (7). In plan it is a square; the roof is supported by four pillars, and it is decorated with exquisite relief patterns in *flat plaster work*. *The beautifully* wrought-iron screen was found in the Chini Mahal.

About 150 yds. to the N.E. of the Gagan Mahal is another old mosque (8), built with the stones of a Jain temple. It has ten rows of pillars seven deep.

E. of this is the **Adalat Mahal**, now the Collector's residence, with a small mosque on the N. side, and an extremely pretty pavilion or pleasure house E. of it and in front of the Civil Surgeon's residence, on a corner of the citadel wall. A little to the N. of this is *Yakut Dabuli's Tomb* and *Mosque*. The tomb is square, with stone lattice-work screens. He decorated the mihrab of the Jami Masjid.

On the extreme W. of the citadel is the **Sat-Manzili** (9), or "Seven Storeys," Rambha's pleasure Palace, from the top of which the whole city could be overlooked. Of this only five storeys now remain. A peculiarity of the building is the number of water-pipes and cisterns round about it. It formed the N.E. corner of a vast structure wrongly called the **Granary** (10), at the S. end of which is a large building, which was the public Palace of the Kings, where their public audiences were held.

This Palace is called the **Chini Mahal** (11), from the quantity of broken china found there, and possesses a fine hall 128 ft. long. It is now used as the Collector's office and the Judge's Courts.

In front of the Sat-Manzili (9), in the centre of the road, stands a beautifully ornamented little pavilion known as **Jal Mandir** (12), signifying that jets of water played in it. From this the moat of the citadel is crossed by a causeway 140 ft. long, but the average breadth of the moat may be taken as 150 ft. Opposite the end of the causeway on the outside is the **Malika Jahan or Jhanjiri Mosque**, one of the most effective buildings in all Bijapur.

N.E. of the gateway and the Old Mosque is the **Makka Masjid** (13), a miniature mosque of beautiful proportions and great simplicity of design. The massive minarets at the corners of the high walls which surround it in all probability belonged to an earlier building. The façade of the mosque proper has five bays of arches about 8 ft. high, is two bays deep, and is surmounted by a dome.

Immediately to the W. is a huge walled space, known as the **Hathi-khana** (18) (elephant stable), and adjoining it S. is a tower which was probably used for the storage of grain. Close by on the E. wall of the citadel is the picturesquely situated high-standing **Chinch Diddi Mosque**.

The unfinished **Tomb of 'Ali 'Adil Shah II.** lies W. of the dak bungalow. It is a noble ruin, a square with seven large Gothic-looking arches on each side, constructed on a terrace 15 ft. high and 215 ft. square. Had not the death of the Sultan (1659) prevented its completion it would have surpassed every other building at Bijapur both in magnificence and size. The cenotaph is in the centre enclosure, which is 78 ft. square, and should have been crowned by a dome.

Close to this tomb on the S.W. is the pretty **Bukhara Masjid**, and just N. of this is the beautiful mosque and tomb of Mirza **Sandal**. To the W. again, half-way to the Haidar Burj, is the **Sikandar Rauza**, the plain grave of the last Sultan (1650-86).

South-Western Quarter.

The **Andu Masjid**, 1608, stands on the E. side of the road, which runs S. from the citadel. It is a two storeyed building, the lower part forming a hall, and the upper part the mosque proper and its small court. The façade has three bays, it is surmounted by a fluted

dome and four small minarets, and the masonry and workmanship are finer than those of any other building in Bijapur.

On the **Landa Kasab** bastion, W. of the Fateh Gate and near the road from the Andu Masjid leading through the S wall, is a fine gun measuring 21 ft 7 in long, with a diameter at the breech of 4 ft. 4 in., and at the muzzle of 4 ft. 5 in., which must weigh nearly 50 tons

A road W from Andu Masjid leads to the tomb of the Begam Sahiba, a wife of the Emperor Aurangzeb, who died of plague, and to the Nau Bagh Another road to the W from 300 yds S of the Andu Mosque leads to the Jami Masjid of Ibrahim I., and to the traditional tomb of 'Ali I., a simple building with a corridor all round In front, on a high platform, is a fine tombstone of dark green stone.

The old execution tree (14), an *Adamsonia* or "*Gorah Imli*," is passed on the way from the citadel to the "Two Sisters," in the compound of the Judge's bungalow

Near the Makka Gate two domed tombs very much alike are known as the Jor Gumbaz and to Europeans as the "**Two Sisters**" (15). The octagonal one contains the remains of *Khan Muhammad*, assassinated at the instigation of Sultan Muhammad for his treacherous dealings with Aurangzeb, and of his son *Khawas Khan*, Wazir to Sikandar. The dome is nearly complete, and springs from a band of lozenge-shaped leaves The space within forms a beautiful room. The square building is the mausoleum of *Abdul Razzak*, the religious tutor of Khawas Khan. It is a large building, now much decayed. Near it (S.) is the *Tomb*, with its unfinished brick dome, of *Kishwar Khan*, whose father, Asad Khan, is repeatedly mentioned by Portuguese writers. He founded the fort of Dharur in the time of 'Ali 'Adil Shah I., and was taken and put to death by one of the Nizam Shahi Kings

Western Quarter.

The **Taj Bauri**, named after Taj Sultana, is inside the Makka Gate The E. wing of the façade of the tank is partly ruined. Two flights of steps lead down to the water beneath an arch of 34 ft span and about the same height, flanked by two octagonal towers The tank at the water's edge is 231 ft. square The water comes partly from springs and partly from drainage, and is 30 ft deep in the dry weather.

Outside the W wall of the city, 400 yds. from the Makka Gate, is the Ibrahim Rauza (also called Roza), a group of buildings which includes the tombs of Ibrahim II 'Adil Shah, his Queen Taj Sultana, and four other members of his family It is said to have been erected by a Persian architect. It is enclosed by a strong wall with a lofty gateway. The courtyard within was once a garden, in the centre of it is raised an oblong platform, upon which stands the tomb, and to the W. of it a mosque, with a fountain and reservoir between them The five arches which form the E façade of the *Mosque* are very graceful; above them, under the rich cornice, hang heavy chains cut out of stone.

A colonnade of seven arches forms a veranda 15 ft. broad round the *Tomb*. The pavement of this colonnade is slightly elevated, and its ceiling is exquisitely carved with verses of the Koran, enclosed

in compartments and interspersed with wreaths of flowers The letters were originally gilded, and the ground is still a most brilliant azure. In some places the gilding also still remains. The border of every compartment is different from that of the one adjoining The windows are formed of lattice work of Arabic sentences, cut out of stone slabs, the space between each letter admitting the light This work is admirably executed, and there is nothing to surpass it in all India Above the double arcade outside the building is a magnificent cornice with a minaret four storeys high at each corner and eight smaller ones between them. From an inner cornice, with four minarets on each side, rises the dome.

In plan the building resembles the tombs at Golconda The principal apartment is 40 ft. square, with a stone-slab roof, perfectly flat in the centre, and supported only by a cove projecting 10 ft from the walls on every side. "How the roof is supported is a mystery which can only be understood by those who are familiar with the use the Indians make of masses of concrete, and with exceedingly good mortar, which seems capable of infinite applications. Above this apartment is another in the dome as ornamental as the one below it, though its only object is to obtain externally the height required for architectural effect, and access to its interior can only be obtained by a dark, narrow staircase in the thickness of the wall"[1] Over the N. door is an inscription in Persian extolling the building in very exaggerated terms The last line is a chronogram, which gives the date 1036 A.H. = 1626 A.D. Over the S door is another inscription in praise of the monarch, with the date 1633. Over the same door is inscribed—

[*Translation*]

The work of beautifying this Mausoleum was completed by Malik Sandal.

Taj-i-Sultan issued orders for the construction of this Roza,
At the beauty of which Paradise stood amazed
He expended over 1½ lakhs of huns,
And 900 more

The hun being Rs. 3½, the total expense was about £50,000 When Aurangzeb besieged Bijapur in 1686 he took up his quarters in the Ibrahim Rauza, which received some damage from the Bijapur gun, now repaired.

Guns and Bastions —The **Burj-i-Sherza**, or "Lion Bastion" (16), so called from being ornamented by two lions' heads in stone, is 300 yds N of the Zohrapur Gate In the W. wall on the right-hand side on ascending the steps of the bastion is an inscription stating that it was built in five months, and giving the date 1071 On the top of this bastion is a huge gun, called the **Malik-i-Maidan**, "Lord of the Battle Plain" At the sides of the muzzle the representation of the mouth of a monster swallowing an elephant is wrought in relief It was cast at Ahmadnagar in a bell metal which takes a very high polish It is 14 ft long, the circumference is about 13 ft 6 in., and the diameter of the bore is 2 ft. 4 in Just above the touch-hole is the following inscription—

The work of Muhammad Bin Husain Rumi.

[1] *History of Indian Architecture*, 2, 273 Fergusson also says that Ibrahim commenced his tomb "on so small a plan, 116 ft sq., that it was only by ornament that he could render it worthy of himself, his favourite wife, and other members of his family."

[1] The tomb of this personage is W of the incomplete tomb of 'Ali 'Adil Shah II. See p 567.

At the muzzle is the following—

The servant of the family of the Prophet of God, Abu'l Ghazi Nisam Shah, 956 A H (= 1551 A.D).
In the 30th year of the exalted reign, 1097 A H , Shah 'Alamgir, conqueror of infidels, King, Defender of the Faith,
Conquered Bijapur, and for the date of his triumph,
He fulfilled what justice required, and annexed the territory of the Shahs,
Success showed itself, and he took the Malik-i-Maidan

About 150 yds E of the Sherza Burj, and near the heavy Idgah, is a strange building, called the **Upari Burj**, or "Upper Bastion," also called the *Haidar Burj* (17), after a General of 'Ali I and Ibrahim II It is a tower 61 ft high, oval in plan, with an outside staircase. On the way up will be noticed a Persian inscription recording the building of the tower in 1583

On the top are two guns made of longitudinal bars held together with iron bands. The larger, called the Lamcharri, "far flier," is 30 ft. 8 in long, and has a diameter of 2 ft 5 in at the muzzle and 3 ft at the breech, the bore is 12 in in diameter The other gun is 19 ft 10 in long, with 1 ft. diameter at the muzzle and 1 ft 6 in diameter at breech

North-Western Quarter.

The **Chand Bauri**—named after the famous Chánd Bibi, the central figure of Meadows Taylor's "A Noble Queen"—in the N.W corner of the city, was built in 1579 A D , on the model of the Taj Bauri, and also has a fine arch over the steps leading down to it.

The gaol, N.W , the way to which passes between lines of mausolea, big and small, is located in an old musafarkhana or caravanserai of remarkable proportions. Close to it, the *Amin Dargah*, of considerable importance, has a collection of old pictures.

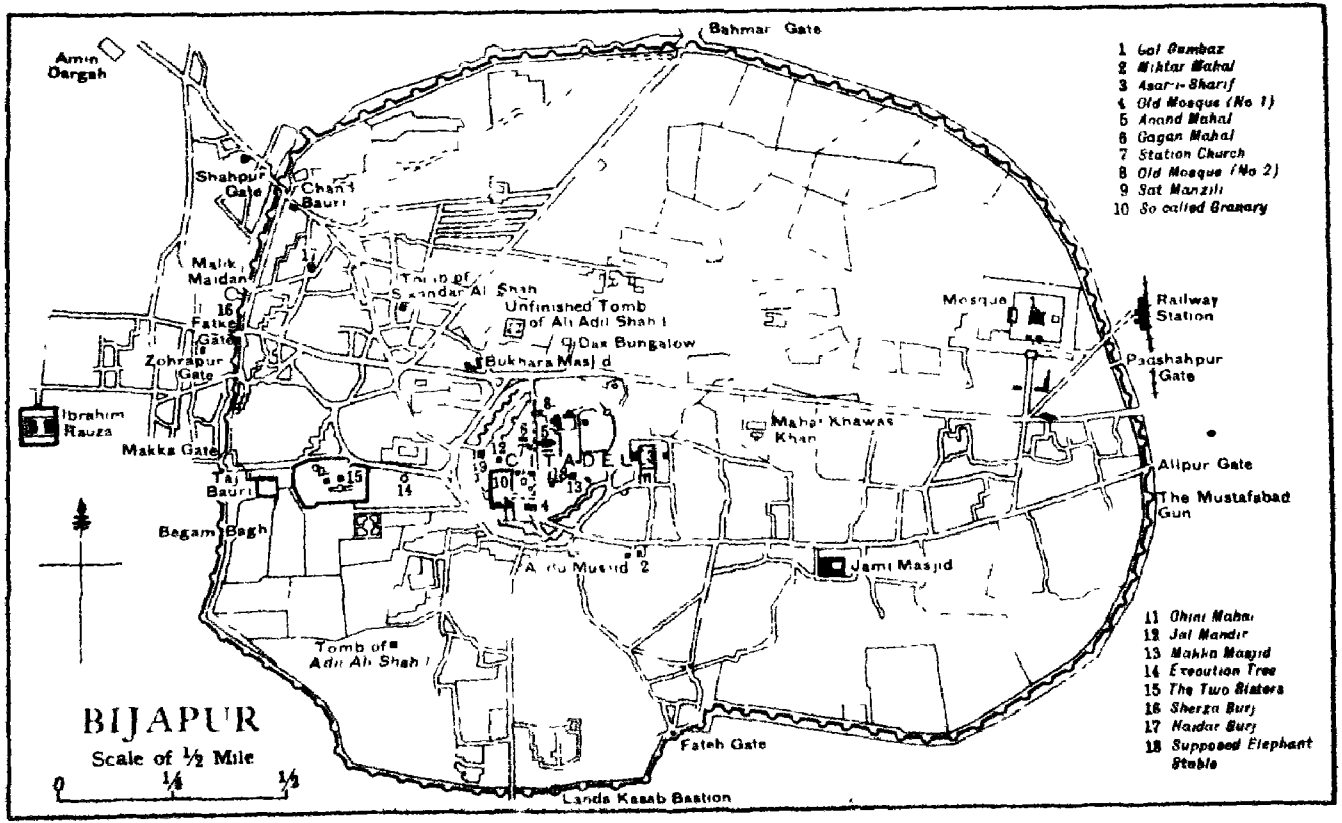
1½ m. to the S W. of the Shahapur suburb, situated to the N W of the city, is the Palace of Afzal Khan (p 536). Adjoining is a mosque of two storeys, and on a platform to the S W. are eleven rows of tombs of women, which have given rise to the tale that they were the wives of Afzal Khan put to death by him

Waterworks—Bijapur was supplied with abundant water by underground ducts One source of supply was a spring beyond the suburb of Torweh, 5 m W of the citadel, another was the Begam Tank 3 m to the S Along the line of the water supply occur towers supposed to be for the purpose of relieving the pressure in the pipes Traces of innumerable baths and cisterns are found in every direction The water from the reservoirs, for instance, in the ruined Palace of Mustafa Khan, ran into a tank, from which it brimmed over into narrow stone channels, which passed in circuitous courses through the gardens, running over uneven surfaces to give it a sparkling and rippling effect.

The modern waterworks are at Bhutnal, about 4½ m. N W.

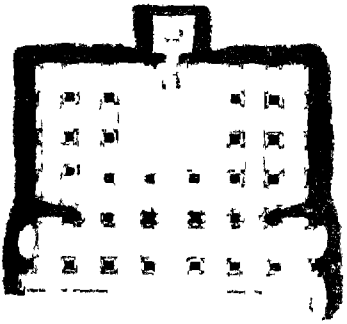
From Bijapur the line continues and at 98 m. crosses the Krishna River by a bridge 3392 ft. long (1884)

115 m. **Bagalkot.** Some 25 m. E at a bend of the river, near the village of Tondihal, not easily accessible, was fought the famous Battle of Talikota on 23rd January 1565, which caused the downfall of the Vijayanagar kingdom (p. 575). The small town of Talikota lies 30 m. N. of the field of battle.


Bahmar Gate
Amin Dargah
Shahpur Gate
Chand Bauri
Malik Maidan
Tomb of Sikandar Ali Shah
Unfinished Tomb of Ali Adil Shah I
Dak Bungalow
Bukhara Masjid
Mosque
Railway Station
Fateh Gate
Zohrapur Gate
Ibrahim Rauza
Makka Gate
Mahal Khawas Khan
CITADEL
Padshahpur Gate
Alipur Gate
The Mustafabad Gun
Taj Bauri
Begam Bagh
Jami Masjid
Tomb of Adil Ali Shah I
Fateh Gate
Landa Kasab Bastion
BIJAPUR
Scale of ½ Mile
0
¼
½
1 Gol Gumbaz
2 Mihtar Mahal
3 Asar-e-Sharif
4 Old Mosque (No 1)
5 Anand Mahal
6 Gagan Mahal
7 Station Church
8 Old Mosque (No 2)
9 Sat Manzili
10 So called Granary
11 Ghini Mahal
12 Jal Mandir
13 Makka Masjid
14 Execution Tree
15 The Two Sisters
16 Sherza Burj
17 Haidar Burj
18 Supposed Elephant Stable

By arranging for a car (high clearance) to meet the early train from Bijapur at Bagalkot, Katgeri (123 m.) or Badami, Aikoli, Pattadakal and Badami can be seen, and the evening train (or car) taken on to Gadag.

Structural temples show development of the Dravidian style, and the early Chalukyan (Indo-Aryan) style, while the caves (*Hindu*) are earlier than the Brahman caves at Ellora. Electric torches are necessary.



Third Cave, from a plan by Dr Burgess.

131 m. **Badami** stn. A District Bungalow near the stn. and a smaller Inspection Bungalow in the town are usually available for tourists, on previous application to the Collector of Bijapur.

Badami (Vatapipura) was once the capital of the Chalukyan Pulakesin I (550-66 A.D.). Narsinhavarman, a *Pahlava* took it in 640 from Pulakesin II (609-40) and destroyed it. Vengi became the capital until Vikramaditya I came back in 653. The Rashtrakutas occupied it in 753.

The fort of Badami is to the N.E. of the town, 3 m. E. from the railway station, and on the heights above are some picturesque temples. One (Dravidian) resembles the Dharmaraja Rath at Mahabalipuram (p. 425), another the Orissan style. To the S. is another rocky, fort-crowned hill in the face of which are four cave temples. The two hills (about 400 ft. high) approach so close to each other as to leave only a gorge, into which the town extends. E. of this is a fine tank.

Colonel Thomas Munro took Badami from the Mahrattas (1818) and the fort appears in his coat of arms as a Baronet.

Three of the **Cave Temples** are Brahman works, and date from 550 A.D. to 580 A.D.; the fourth is Jain and probably dates from 650 A.D.

The *First Cave*, excavated about 50 ft. up in the face of the rock, is consecrated to Siva. The pillars are slightly carved in relief to about half-way from the top. The veranda rests on a plinth, along the front of which are Ganas (dwarf attendants of Siva) in all sorts of attitudes. On the left of the veranda is a dwarpal with a Nandi over him. Opposite this dwarpal is a figure of Siva, 5 ft. high with eighteen arms, dancing the tandava.[1] Behind the veranda is a chapel, and beyond an antechamber in which, on the left is Vishnu, or Harihara, with four hands, holding the usual symbols, and on the right the Arddhanariswar, or combined male and female figure, attended by a Nandi bull and the skeleton Bringi. A figure of Mahesheshwari, or Durga, destroying the buffalo demon Mahesheshwar is on the back wall, on the right wall Ganpati, and on the left Skanda. Between the antechamber and the hall are two pillars only. The hall has

1 See descriptions on pp. 28-29.

eight columns of the Elephanta type, and measures 42 ft. by 24½ ft. The ceiling and that of the antechamber are divided into compartments by carved beams. In the centre compartment of the hall roof is a relief of the Great Snake's head At the back of the hall is a small chapel with a lingam.

The Second Cave Temple is rather higher At the ends of the platform in front of it are two dwarpals with a female attendant. Four square columns, finely carved, separate the platform from the veranda, on the left of which is the Vahara Avatar, or Vishnu in the form of a boar, and on the right the Dwarf Avatar of Vishnu, dilated to an immense size, putting one foot on the earth and lifting the other over the heavens On the ceiling in front of this is Vishnu with four arms riding on Garuda, and in the central square of the ceiling is a lotus with sixteen fishes round it On the top of the wall in a frieze are the figures of Vishnu as Krishna The roof of the inner chamber, 33 ft by 23½ ft., is supported by eight pillars, and the corbels are lions, human figures, vampires, elephants, etc The adytum has only a square *Chavaranga*, or altar

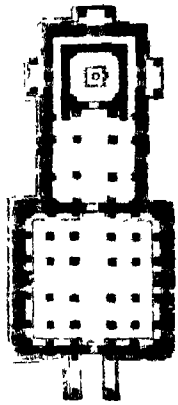
A sloping ascent and more flights of steps lead up to a platform, and to a doorway, on the right of it is an inscription in old Kanarese (786 A D), a charter from Sita Mahadevi, wife of Dhruva Rashtrakuta (775-815) At the top of yet another flight of steps is the platform in front of

The Third Cave, below a scarp of 100 ft. of perpendicular rock, is, says Dr Burgess, "one of the most interesting Brahmanical works in India." The façade is 70 ft. from N. to S. Eleven steps lead up to the cave, and on the plinth Ganas are represented. The brackets of the pillars represent male and female figures, Arddhanariswar, Siva, and Parvati, and on the columns themselves are carved elaborate festoons, and below medallions with groups of figures Traces of painting are visible on the under side of the eaves and the roof of the veranda. At the W. end of the veranda is a statue of Narsingh, the fourth incarnation of Vishnu, a very spirited figure, 11 ft high On the S wall is Harihara, of the same height, and beyond the veranda at the side of the first is the Dwarf or Vamana Avatar At the E end is Narayan, seated under Sheshnag On the outer side of this is Vishnu reclining on a great snake, and on the inner wall is the Varaha, or Boar, incarnation, to the right is an inscription in Kanarese of Mangalesvara, dated Saka 500+ 578 A D The hall measures 65 ft by 37 ft Eight pillars form a space in front of the shrine, and on each side a recess The ceilings are divided into compartments, with carved panels

The Fourth or Jain Cave, lies W of the other three The platform beyond the wall overlooks the lake or tank, and commands a fine view A broad overhanging eave has been cut out of the rock in front of this cave On the left of the veranda, 31 ft by 6 ft., is the Jain divinity Parasnath, with bands round his thighs and cobras coming out below his feet On the right of the veranda is a Gautama Swami attended by snakes. The hall behind is 25 ft by 6 ft., in the shrine is a seated statue of Mahavira

At Pattadakal, 10 m. N.E. of

Badami, on the left bank of the Malprabha river, are several temples, both Brahmanical and Jain, dating from the 7th or 8th century. They "are very pure examples of the Dravidian style of architecture; they are all square pyramids divided into distinct storeys, and each storey ornamented with cells alternately oblong and square Their style of ornamentation is also very much coarser than that of the Chalukyan style, and differs very much in



Temple of Papnath, Pattadakal

character. The domical termination of the spires is also different, and much less graceful and the overhanging cornices of double curvature are much more prominent and important" (Burgess)

One group is very interesting because it exhibits the Dravidian and Chalukyan styles in absolute juxtaposition (see *Architecture of Dharwar and Mysore*, pp 63, 64) The Temple of *Papnath* is of the Chalukyan style, another, rather later, of *Virupaksha*, dates from about 800 A.D. The Temple of Papnath, 90 ft. long, including the porch, and 40 ft broad, may have inspired Kailasa at Ellora.

At Aiholi, 8 m. to the N.E. of Pattadakal, there is a very numerous collection of archaic temples The *Meguti Temple* (early Chalukyan) is apsidal with a veranda all round, and bears an inscription (634 A.D.) of Pulikasin II., some pillars are carved. The *Durga Temple* has some very remarkable carving, and here, too, are many dolmens

Aiholi can be reached from Katgeri station (123 m.), at a distance of about 12 m from the railway, the Malprabha river must be crossed

143 m (from Hotgi) the Malprabha river is crossed.

173 m from Hotgi is **Gadag** junction (R, D B, ½ m)

Gadag (anciently Kratuka) is a centre of cotton trade The cotton and the Maconochie Markets are considered to be the best designs in the Bombay Presidency. In its N W corner is a *Vaishnavite Temple* The entrance is under a high gateway or gopuram, with four storeys, and 50 ft high The door is handsomely carved with sixteen rows of figures in relief on either side The Someswara Temple, now a school, is richly decorated throughout

In the fort is a Siva *Temple* of Trimbakeswar or Trikuteswar, the "Lord of the Three Peaks." The outside is one mass of most elaborate carving Two rows of figures run along the entire front and back, those of the lower row are 2 ft. 9 in. high, including their canopy, and are 156 in number.

In the upper row are 104 figures, 13 in. high, 52 in the front, and the same in the back. Between the four pillars on the E. is a colossal bull. Immediately behind the main portion of the temple, to the right of the enclosure, is a *Temple to Sarasvati*. The porch is the finest part of it; it contains eighteen pillars, some of them exquisitely carved, and six pilasters. The three first of the two centre rows of pillars deserve particular notice for their elegance of design and exquisite carving.[1] There are numerous inscriptions at the temples, one of which has the date Shaka 790 = 868 A.D.

Lakkandi (anciently Lokkikandi) is about 8 m. S.E. of Gadag. The place is full of ancient temples.

The façade of the *Kashi Vishwanath Temple* has been supported by four pillars, of which that to the N. has gone. The doorways are elaborately carved, and though the roof is ruined, the temple is by far the handsomest here; but, being built of coarse granite, the carving is not clear and sharply defined.

To the W., on the opposite side of the road, is a *Temple to Nandeswar*, or "Siva, Lord of the Bull Nandi." There is a Kanarese inscription on the ledge of the W. division of the roof, between the four pillars. It stands on the N. side of a tank.

[1] Meadows Taylor says "It is impossible to describe the exquisite finish of the pillars of the interior of this temple, which are of black hornblende, or to estimate how they were completed in their present condition, unless they were turned in a lathe; yet there can be little doubt that they were set up originally as rough masses of rock, and afterwards carved into their present forms. The carving on some of the pillars and of the lintels and architraves of the doors is quite beyond description. No chased work in silver or gold could possibly be finer, and the patterns to this day are copied by goldsmiths, who take casts and moulds from them, but fail in representing the sharpness and finish of the original."

The *Temple of Iswara*, the roof of which has fallen in, is very old; the exterior is handsomely carved, and is said to be the work of Jakanacharya, the great sculptor and architect of the Hoysala Ballala kings, who executed the carvings at Halebid (p. 586).

A narrow path thickly shaded for about 100 yds., leads from it to a *Baoli*, or well, the sides of which are faced with stone. There are flights of steps to the water on three sides, and on either side of the first step is an elephant, so well carved that it is popularly attributed to Jakanacharya.

200 yds. from this is a *Temple to Manikeswar*, a name of Krishna, so called because every day he gave to Radha a ruby, which is called a manik. A very pretty small tank adjoins the temple. It is faced with stone, and has several buttresses projecting into the water, said to be carved by Jakanacharya. On either side of the entrance into the temple are four pillars of black basalt. This temple is surrounded by beautiful trees of great size.[1]

From Gadag the ry. runs E. to Guntakal junction (Route 30) and W. to Hubli junction (for Bangalore and Mysore), Dharwar, and Londa junction (Route 31).

[1] See *Architectural Antiquities of Western India*, by H. Cousens, p. 27.

ROUTE 30.

GADAG JUNCTION to HOSPET (for Hampi or Vijayanagar), Bellary, and Guntakal Junction

GUNTAKAL JUNCTION to

(*a*) **Dronachellam** for **Kurnool** and **Secunderabad, Nandyal, Guntur,** and **Bezwada**; and

(*b*) **Dharmavaram** and **Bangalore.**

Gadag junction (R., D B) (p. 573) on the Hubli-Guntakal Section of the Madras and S Mahratta Ry

35 m from Gadag, **Koppal** The line passes through an outlying portion of the Nizam's Dominions There are two forts at Koppal, the upper, which is on the summit of a hill, 400 ft above the plain, was described by Sir John Malcolm as the strongest place he had seen in India The lower fort was rebuilt in 1786 by Tipu's French engineers, and was taken in 1790, after two months' siege, by the British and the Nizam's forces It was taken by Brig-Gen. Pritzler in 1819

49 m. Munirabad 3 m to Mallapuram (dam for irrigation and electric supply)

52 m the Tungabhadra River is the boundary between the Madras Presidency and the Hyderabad State

53 m **Hospet** junction (R., D.B.). N G. branch, 43 m S, to Kottur. Another N.G branch to Ramandrug, 18 m., and Samehalli, 37 m. The Ramandrug plateau (3500 ft.) which is within the Sandur State (p. 579), was the sanatorium of Bellary when troops were stationed there

Hampi (9 m.) or *Vijayanagar* can be visited from Hospet. The station-master will arrange for a pony jhatka. But Bellary (p. 578) is only 34 m. away by car.

Vijayanagar (City of Victory) and Hampi.—Hampi is the site of the ancient capital of the Vijayanagar Kings, who dominated S. India from 1336 to 1565 A D., the date of the Battle of Talikota; even after 1565 they continued to rule elsewhere in S. India The 600th anniversary of the founding was celebrated at Christmas 1936.

The ruins cover 9 sq m., including *Kamalapur* on the S and *Anagundi*, the earliest seat of the dynasty, N of the Tungabhadra. Mr R Sewell's *A Forgotten Empire* (George Allen, 1924) deals fully with them

The Kamalapur D B K [1] is 7 m N.E from Hospet. It is an old temple converted into a good D.B There is a fair road through the area between Kamalapur and Hampi, described as "virtually a vast open-air museum of Hindu monuments in the Dravidian style of architecture"

Vijayanagar was founded on the fall of the Hoysala Ballala dynasty (p 586), about 1336 A.D., by two brothers, Bukka and Harihara, who had been driven out of Warangal. Their descendants flourished here till the Battle of Talikota (1565), and afterwards at Penukonda, Vellore, Chandragiri, and (as some writers say) Chingleput, for another century, until finally overwhelmed by Bijapur and Golconda. The Rajas of Anagundi, an old village on the

[1] Plan facing p. 578.

opposite side of the Tungabhadra River (now in the Nizam's Dominions) claim to be the surviving representatives of the dynasty.

During the two and a quarter centuries that the Vijayanagar Rajas held the city of Hampi they extended it and beautified it. The Venetian traveller Cæsar Frederick, who saw "Bezenagar" in 1567 soon after its fall, describes it as being 24 m. round, enclosing several hills. There were ordinary dwellings with earthen walls, but the three Palaces and the pagodas were all built of fine marble.

The rout of the Hindu forces at Talikota was so complete, and the dismay caused by the death of the old King Rama Raya was so great, that no attempt was made to defend the city, which was completely gutted. Colonel Briggs stated that for two centuries afterwards the head of the Hindu Prince used to be annually exhibited at Ahmadnagar.

The main portion of the city was enclosed by walls forming a semicircle on the S. bank of the river, in the middle of this was the inner walled citadel and Palace, and on the N. bank of the river was another large fortified area occupying the suburb of Anagundi, further outer lines of fortifications enclosed the city on the S. side.

Proceeding N. for ½ m. from the D.B., the first remarkable building is the **King's** or **Ladies' Bath**, forming a portion of the King's Palace. It is a rectangular structure, with a *haux*, or reservoir, in the centre, 50 ft. square and 6 ft. deep, in which fountains played. N.W. of the entrance are remains of the granite aqueduct which was carried from near the throne to the bath. The corridor of the bath, supported by twenty pillars, has an arched ceiling, richly carved with flowers. On either side is a projecting gallery carved.

Slightly to the N. of the bath is a fine tank, and N. of this is the structure called the **Arana**, or the **Sinhasan**, the King's Throne. It consists of a succession of granite platforms 31 ft. high, the outer walls of which are carved in relief with representations of elephants, dancing-girls, hunting-scenes from the *Ramayana*, and camels, well executed. W. of the throne is an underground labyrinth, and N. are a remarkable stone trough and the ruins of a fine bazar. The stones forming the trough measure about 11 ft. by 6 ft., and the supports are 5 ft. 8 in. high.

N. is the temple of Rama-chandra-swami (1513), with pillars handsomely carved in relief with figures. The quadrangle inside measurement is 110 ft. from N. to S. and 200 ft. from E. to W. The temple has a vestibule carried on twelve pillars. The shrine is supported by black pillars most elaborately carved. On the plinth of the left gateway is a very long inscription in Old Kanarese. The blocks of which this temple is built average 7 ft. 7 in. long and 2 ft. 6 in. deep.

To the E. of this group of buildings, and across the road leading through the citadel to the N., are the ruins of three temples, one situated on the top of a small hill, while at a distance of ½ m. to the N.W. of it are situated the **Zenana**, the Elephant Stables and the Riding School lie N.E.

In an enclosure of walls 40 ft. high is the building called the Zenana Palace in the N.W. corner, and a pavilion, figured in Fergusson's *Indian Architecture* (1, 417), and commonly called the Council Room, towards the S.E. corner. At various corners of the walls are similar small pavilions, in the N. wall is a large tower, and in the W. wall is a fine gateway closed over by corbelled stones. The pa-

vilions are too heavy to be really effective, but are picturesque in their present state of ruin; the painted decoration of the upper rooms of the main pavilion is still visible.

To the E. of the Zenana enclosure is a smaller *sinhasan*, or throne, and the range of **Elephant Stables** divided into eleven domed compartments, some of which were elaborately decorated inside. Along the front of the building is a broad drip-stone carried by brackets The so-called Riding School or Concert Hall stands at right angles to the stables on the N S W is another temple, Yallamna, and between it and the three temples on the hill is an interesting rock excavation, one of the chambers of which has a drip-stone carved on it

Turning ¼ *m* W, *and passing* outside the citadel through a gateway, and crossing the remains of a fine bazar, the next group of buildings of interest is reached on the S side of the hill which dominates the village of Hampi

The first object, on the left of the road, is a gigantic image of the **Narsingh Avatar** (1528), carved out of a block of granite, in an enclosure of ponderous granite blocks. The figure is that of a colossal lion-headed man with enormous projecting circular eyes and a huge mouth, it is seated, and has its legs and arms broken. A spirited carving of the Shesh Nag forms the canopy of the idol The *monolithic* uprights at the door are 18 ft. 8 in. high out of the ground. Just outside the gate is an upright stone with a Kanarese inscription on both sides. A few yards N. of this enclosure is a small temple containing a huge Lingam and Yoni, the largest representation of these objects of worship existing.

N.E. is a temple to **Krishnaswami** (1513), enclosed by a granite wall. The breadth of the chief court is 200 ft. from N. to S., and the length 320 ft. from E. to W. At the gopuram which forms the entrance is a stone 8 ft. high, with a Kanarese inscription on both sides There is also on the columns of the gopuram an inscription in Nagri and Kanarese. The carving of the various portions of the temple is noticeable.

N of this temple, 50 yds. off the road, is a temple with a **Ganesh** 10 ft high; and a few yards farther another, built of granite, also dedicated to Ganesh, in which the idol is 18 ft high. The size of the enormous granite slabs which form the roof is remarkable.

The precincts of what is now called *Hampi* are entered, and *Langur* monkeys may be seen *in considerable numbers* A roadway, at a steep incline (almost impracticable for motor-cars), has been substituted for the old steps After passing on the left a square building, which may have been a *math*, and some gigantic trees, the portal of the **great temple of Hampi**, which is sacred to Siva, under the name of Pampapati Swami, is reached The gopuram at the N. entrance is truly gigantic, and taken in all its dimensions is (being over 165 ft high) perhaps one of the largest in India The length of the first quadrangle from E to W is 208 ft, and its breadth from N to S. 134 ft. The second quadrangle is smaller, and has arcades all round built of granite. Europeans must not enter the second inner quadrangle, unless permitted to do so by the temple authorities

At the E. end of the grassy avenue in front of the temple is another large temple, on a ridge approached by a long flight of steps with pavilions. The road

T

now follows the river, which bends at this point, and after passing a temple of Ramaswami (Ramchandra) with a stone lamp-stand in front, and the ruins of an old bridge, reaches at a distance of ¾ m. the temple (1521) of **Vithoba**, or Vijaya Vitalaswami, an *avatar* (incarnation) of Vishnu, figured in Fergusson (I, 403). In front of this is a stone-weighing frame, and at the S. end of it is a stone rath (car) 26 ft. high with wheels which revolve.

There are three temples in the enclosure, which has four Dravidian gopurams. The second temple, on the left of the entrance, is much the largest and finest. The ceiling was formed of slabs of granite 35 ft. long, but all the slabs have been thrown down except two in the centre. There are fourteen columns, which supported the roof. Most of them are carved into representations of horsemen mounted on *yali* lions. One represents the Narsingh Avatar. In some cases the yali is supported by elephants. Within is a court 100 ft. long from E. to W. and 62 ft. broad from N. to S. On the S. side are numerous Kanarese inscriptions. S. of the temple is a large dharmsala with sixty-two pillars, on which are curious reliefs of female monkeys and dwarfs. On the right of the entrance is a platform with thirty-nine shorter pillars. These are also carved with curious representations of monkeys, their heads crowned with two small figures of gods. The third temple is some 20 yds. N. of the car.

Anyone who may wish to ascend the hills above Anagundi, on the left bank of the river, for the sake of a general view over Vijayanagar, can cross the Tungabhadra in a circular basket-boat, such as have been used on the Tigris and Euphrates for 2500 years, but the Matanga Temple affords a general view.

A full account of the ruins is contained in the Report of the Archæological Department of the Southern Circle, Madras, for 1912-1913.

93 m. from Gadag Jn., **Bellary** (R., D.B., alt. 1619 ft.) junction for Rayadrug (34 m. S.). Formerly an important military station on the Madras-Bombay Trunk Road. A spur from the Sandur range runs along the S. side of the Cantonment, and extends E. to Budihal, 8 m. distant, where it abruptly terminates. On the N. and Peacock hills neoliths were found in 1872. A high point in this range opposite the fort is called the *Copper Mountain*, the height being 1800 ft. above the plain and 3285 ft. above the sea. Excavations are still to be seen, said to be the remains of mines worked by order of Hyder 'Ali, but abandoned. Hematitic iron ore is found in large quantities, some possessing magnetic properties.

The *Fort* is built on a bare granite rock of semi-elliptical form, rising abruptly from the plain to the height of 450 ft., and defended by two distinct lines of works, constituting the lower and upper forts, both built of granite. In the upper one stands the citadel, which is reputed to be of great antiquity. Several tanks or cisterns, partly artificial, exist in the rock, and hold rain-water.

Under the wall at the E. gate is a tomb, built in the Muslim style, but said to cover the grave of a French engineer. The tradition is that when Hyder Ali took possession of Bellary in 1768, he employed this man to build the upper and lower forts, and then hanged him. A similar story is told of the Hosur fort in the Salem District, but with Tipu Sultan and a British officer, who was his prisoner, as the persons concerned.

Bellary came into British possession in 1800, when the Nizam made over to the E I Company the districts of Anantapur, Cuddapah, and Bellary, which had been ceded to him after the fall of Seringapatam in 1799, in lieu of payment for the subsidiary force maintained at Hyderabad. Moplah (p 638) prisoners captured after the rising in Malabar in 1921 were interned here

The hill fortress of **Rayadrug** has Jain antiquities (rock-cut bas-relief sculptures) and three cells Other sights are the Temple of Bhimeswara at Nilagunda, 8 m S W of Harpanahalli (excellent road for 7 m), the ruined Harpanahalli Fort; the Kalleswara Temple at Bagali, 4 m N of Harpanahalli, a prehistoric mound at Budi-Canive, representing the remains either of those slain in battle or of great sacrificial holocausts, the Kappagallu, known as "Peacock Hill", and a very fine well at Tambarahalli

16 m W of Bellary is the small Mahratta State of **Sandur** (p 575) The first Chief settled here in 1715, the present ruler, Raja Srimant Yeshwanta Rao, whose family name is Hindu Rao Ghorpade, succeeded in 1928

Ramandrug (p 575) can be reached by a road which winds along the face of the hill and is just wide enough for a motor

The railway from Bellary to Guntakal was opened as a broad-gauge branch in 1871 and converted to metre-gauge in 1887

101 m. the Hagari River is crossed by a bridge 2390 ft. long.

123 m. **Guntakal** station. Junction for the broad-gauge line from Bombay *viâ* Raichur to Madras (Route 26). A branch, opened 1893 (metre-gauge), runs S. to Bangalore (see (*b*) below). Another metre-gauge line, completed 1890, proceeds N E. to Dronachellam (for Kurnool and Secunderabad) and thence to Bezwada.

(*a*) *Guntakal to Dronachellam and Bezwada.*

17 m from Guntakal, **Tuggali** station Pattikonda (D B.) is 7 m. by road to the N. of Tuggali. Sir Thomas Munro, Governor of Madras, died here on the 6th July 1827 of cholera, when on tour in the District. To his memory Government constructed a fine cut stone well with a *mandapam*, or porch, and planted a grove of tamarind-trees around it A new town called Munro's Square was built on this occasion, with a rampart wall all round. The Taluk office contains an interesting bas-relief of Munro (which is rapidly crumbling) and a very mediocre replica. Munro was known in the "Ceded Districts" of Bellary, Kurnool and Cuddapah as the "Father of the People," and many local ballads, which are still sung, were composed in his honour.

43 m. from Guntakal, **Dronachellam** or **Dhone** (R, D.B.).

Pyapalli (D.B.) is 15 m from Dhone, on the Gooty road, and 11 m from Gooty. Ry Stn. on the Madras-Raichur line. It is situated at the foot of a granite hill, and is 1750 ft above the sea-level, it serves as a sanatorium for the Kurnool District

Dronachellam (Dhone) to Kurnool and Secunderabad.

A branch line runs from Dhone N. to Kurnool (opened 1909) and Secunderabad.

12 m. from Dhone, **Veldurti**, (D.B.) 5 m. to the N.E. of Veldurti is a village called Ramallakota, where there are indications of alluvial washings and rock-working for diamonds

34 m. from Dhone **Kurnool** (D.B.) is situated at the junction of the Hindri and the Tungabhadra. The old fort was dismantled in 1862, but the wall along the River Tungabhadra and some of the bastions are still intact. There are two gates leading to the river. The ruined Palace of the Nawabs stands on a bluff

There are mosques and a fine mausoleum of Abdul Wahab, Subadar of Bijapur and the first Nawab, to whom the place was given in *jagir* by the Emperor Aurangzeb. These Pathan Nawabs became subjects of the Nizam-ul-Mulk and afterwards of Hyder 'Ali. In 1750 one was responsible for the deaths of Nasir Jang and Muzafir Jang, so de Bussy destroyed the town.

In 1838 the last Nawab Ghulam Rasul Khan was engaged in treasonable military preparations The town and fort were then captured after a short fight The Nawab escaped to Zorahpur (a town named after Zorah, the sister of the first Nawab, which lies on the S bank of the Hindri), and was deposed in 1839. A large proportion of the people speak Hindustani, although the majority of them are not Muslims

An *anicut* across the Tungabhadra at Sunkesula, a village 17 m. from Kurnool, feeds the Kurnool-Cuddapah Canal. There are bungalows at convenient stages, and boats can be obtained between July and December on application to the Executive Engineer at Kurnool. The Government Fisheries Department has a fish-breeding farm at Sunkesula.

From Kurnool a metre-gauge line (opened 1928) of H.E.H. the Nizam's Railway runs N (151 m.) to Hyderabad and **Secunderabad** (Route 28) direct service of trains between Secunderabad and Bangalore city (403 m.) *viâ* Dronachellam, Guntakal and Dharmavaram (see *(b)*, p. 582)

The Tungabhadra River is crossed by a bridge 2950 ft. long (1928), and at 33 m. the Krishna River bridge is 2958 ft. long (1922)

34 m. from Kurnool on this line is **Gadwal**, in the Nizam's Dominions, with a palace and old Hindu temples The walls of the fort, which are well preserved, are of mud Under the Hindu Empire of Vijayanagar (1336-1565) the Poligars of Gadwal were important rulers

80 m. **Mahbubnagar** (alt. 1636 ft.) is a commercial centre

91 m. **Jadcharla** The station is surrounded by rocky hills in which bears and panthers can be shot. Motor-bus service, 25 m., to Nagar Kurnool; the road continues to Amrabad, where big game is plentiful. Arrangements for transport can be made at Jadcharla with the State Railway motor-bus service: Govt. R.H. at Manamora Shooting licences must be obtained from the Political Department at Hyderabad. E. of Jadcharla is the Hindu fort of Devarakonda.

114 m. **Shadnagar** (D.B.), 2102 ft. above sea-level, is the highest station on the Nizam's Ry., on the watershed of the Krishna and Godavari Rivers.

151 m Hyderabad (metre-gauge) station; thence 5 m to **Secunderabad** Junction (p. 558) for the Godavery Valley line to Aurangabad (for Ellora) and Manmad (Route 4).

Dronachellam to Bezwada.

51 m. from Guntakal, **Malkapuram.** 7 m. to the S of this there is a village called Alliabad, a hamlet of Munimaduga, where there are diamond mines

66 m from Guntakal, **Betamcherla.** Ruins of a rock fortress Barytes and steatite are found in the neighbouring villages of Muddavaram, Ambapuram, and Balapalapalli

81 m. from Guntakal, **Panyam** (D B) A road connects it with Banganapalle, the chief town of a Muslim State. Nawab Saiyid Fazl Ali Khan Bahadur was born in 1901 and succeeded in 1922. There are diamond mines near Banganapalle. Excellent blackbuck shooting in the State.

91 m. from Guntakal is **Nandyal** (alt 675 ft), in the basin of the Penner river There is a R H. which is sometimes available on previous application to the Superintendent, Agricultural Department, Bellary. The Government Agricultural Farm is close by There is also a canal bungalow. The place takes its name from Nandi, the bull of Siva, to whom a temple is dedicated A hoard of Roman coins was found in 1932. There are several mission buildings.

Before reaching Nandyal the line passes through the Yerramalai Hills, and, after passing it, through the Nallamalai Hills, by many picturesque curves.

100 m. from Guntakal, **Gazulapalli.** There is a forest R.H. Big-game shooting can be obtained in the Nallamalais on licence granted by application to the District Forest Officer, South Kurnool. Mahanandi, a place of pilgrimage with a temple and a perennial spring, is 5 m. distant.

115 m the Dorabhavi Viaduct, 670 ft long, is 153 ft. high (1890).

133 m from Guntakal, **Giddalur.** A P.W.D. R H. and forest R.H. The road from Nandyal to Giddalur runs through the Nallamalai Forest, which covers some thousands of miles and in some parts is almost impenetrable During the 1914-18 war, hay was pressed and baled for despatch to other parts of India and Mesopotamia.

154 m from Guntakal, **Cumbum.** Varadarajamma, wife of Krishna Devarayadu of Vijayanagar (1509-1530), is said to have constructed the beautiful tank here, by damming by a bund 57 ft. high a gorge between two hills It irrigates 6000 acres There is a P W D. R H on the tank bund.

209 m from Guntakal is **Vinukonda** (D.B), celebrated in Hindu mythology as the place where Rama heard of the abduction of his wife Sita: it has a striking hill with twin peaks.

260 m. from Guntakal is **Guntur** junction (R. . D.B.). A metre-gauge line and road run 80 m. W. to Macherla on the bank of the Kistna river. At Nagarjuni Konda (15 m.) is a Buddhist stupa (discovered 1925), with a Museum.

The principal Telugu-speaking districts are Nellore, Guntur, Godavari (Rajahmundry) and Kistna (Masulipatam). Guntur was important in the 18th century as a

capital of the 4 N. Circars (Sirkars). Under the treaty of 1766 the Murtazanagar or Guntur circar was given to Basalat Jang, the brother of Salabat Jang and Nizam Ali. He took over French troops in 1759, and was never without a French officer in his service. There are many old French tombs in the cemetery

Guntur is an important American Mission station Kondavid (1674 ft.) to the W. was a much-contested fortress in the times of the Golconda kingdom. The Buddhist remains at Amaravati (p. 510) are 22 m by road from Guntur. The railway crosses the Kistna (p. 511) before entering

279 m **Bezwada** (R., D.B.) on the main line between Madras and Calcutta (Route 25, p 509) Except during the monsoon months, motorists can cross the river by the anicut dam

(*b*) Guntakal to Bangalore.

Passengers for Bangalore by the Bombay-Madras mail (Route 26) change at Guntakal to the metre-gauge From Secunderabad there is a direct service to Bangalore without change (see p. 559).

24 m. the Penner River is crossed by a bridge of 11 spans of 150 ft. (1892).

43 m. **Anantapur** (D.B.K.). There are interesting antiquities at Penukonda ("Big Hill"), a residence of the Vijayanagar Rajas as early as 1354 Tirumal Raya moved there after the disastrous Battle of Talikota, 1565 The remains of the citadel of the fort are on the top of the hill, 3058 ft. high. The buildings are described in the Report of the Archæological Department, Southern Circle, Madras, for 1912-1913. In the compound of the Sub-Collector's office is a fine *stambha* or stone pillar, some 40 ft high. When the "Ceded Districts" (Bellary, Kurnool and Cuddapah) were made over to the E India Company by the Nizam in 1800 (p 531), Sir Thomas Munro was appointed First Principal Collector. Anantapur contains several buildings associated with his name A tablet on the Collector's guest-house records that he lived there; and the Court House, in which there is an engraving of Shee's portrait, is known as Munro Hall.

Near Kalyandrug, 36 m W S.W of Anantapur and 22 m E of Rayadrug railway station (on the branch from Bellary), there are innumerable prehistoric remains, cairns, and ruined cell-tombs.

Bus services from Anantapur to Kalyandrug, S W, and to Tadpatri, N E

63 m from Guntakal is **Dharmavaram** junction (R, alt. 1182 ft), famous for silk saris Branch of the M & S M Ry to Pakala Jn (142 m) on the Renigunta-Katpadi line (Route 26, p 531). 3½ m from the Mulakalacheruvu station (65 m) on the Pakala line is the picturesque Sompalle Temple, with a stone car and beautiful monolithic flagstaff 50 ft. high

113 m from Guntakal, **Hindupur** (R.) At Lepakshi, 9 m E. of Hindupur, is a large temple to Virabhadra (a form of Siva), with a colossal stone bull about 15 ft. high and 27 ft in length standing near it. The temple is in the Vijayanagar style of architecture, and has an inscription ascribing to its building the date 1538 A.D.

The Mysore State is now entered.

152 m. **Dodballapur**. 12 m. to the E. of this station rises

Nandidrug, a strong hill fort 4851 ft. above sea-level, 30 m.

from Bangalore by the Bellary road. It was thought impregnable by Tipu Sultan, being inaccessible except from the W., and there strongly fortified. It was taken, however, by General Medows on the 19th October 1791, with thirty casualties, chiefly by great boulders rolled down. Tipu's Drop, or Rock of Death, projecting from the fortress, has a precipice of 1000 ft clear below it

Nandi (on the N G Bangalore-Bowringpet Section, Mysore Railways, p. 598) is the railway station for visitors to the Nandidrug Hill From the station to the foot of the Hill the distance is about 2½ m from a village there, named Sultanpet, to the top there is a flight of about 1175 steps chairs can be obtained for the ascent, coolies available for luggage, there is also a bridle-path, and a motor-road to the summit There is a perennial spring of pure water (*Amrita Sarovar* or "Lake of Nectar") at the summit There are five furnished bungalows and an hotel with electric light, and excellent (including vegetarian) catering The place is under the management of the Mysore State, and the Superintendent, Government Gardens, Lal Bagh, Bangalore, will, on application, arrange for accommodation and food There are sheds for motors

174 m. from Guntakal is **Bangalore** junction (Route 31, p. 588).

ROUTE 31.

POONA by **Londa** Junction to **Dharwar**, **Hubli** Junction, **Harihar**, **Birur** (for **Shimoga** and the **Gersoppa Falls**), **Banavar** (for expedition to the temples at **Halebid** and **Belur**, also to the Hill of **Indrabetta**, near **Sravana Belgola**), **Arsikere**, **Tumkur** and BANGALORE.

The Poona-Bangalore mail proceeds as in Route 27 to (277 m.) **Londa** Junction (p 542). From Londa the line (opened 1887) runs E to

321 m from Poona and 305 m. from Bangalore, **Dharwar** station (R, D B, 1½ m.) This was once the headquarters of the Southern Mahratta Railway, removed to Madras in 1908 on amalgamation with the Madras Railway. Dharwar is a large town on the watershed, but 20 m inland from the edge of the ghats with an altitude of 2384 ft The District Jail is partly organised for juveniles on the Borstal system

On the N is the *Fort*, which was taken from the Mahrattas by Hyder 'Ali in 1778, and stood a siege in 1790 from a British force co-operating with the Mahratta army under Parshuram Bhao. One of Tipu's Generals, Badr-ul-zaman, with 7000 regulars and 3000 irregulars, having thrown himself into it, defended it with great spirit. After a protracted siege of twenty-nine weeks Badr-ul-zaman surrendered on condition of being allowed to march out with all the honours of war. The allies took possession of the fort on 4th April 1791, and

the Mahrattas attacked Badr-ul-zaman as he was marching away, wounded him, made him prisoner, and dispersed his force. Little remains of the fort, which is occupied by the Civil Hospital and a number of bungalows.

The *Anglican Church*, ½ m. W of the D.B., was built in 1886 A chaplain, who resides at Hubli, has charge of Dharwar, Hubli, Gadag, Bijapur and Castle Rock There is also a *Roman Catholic Church*, built in 1845. The last regular troops left in 1884, and the site of the old Cantonment, 2 m N.W., is occupied by police lines

The Karnatak [1] (Carnatic) College (1917) is affiliated to the Bombay University The large building, conspicuous from the train, formerly the Ry Offices, was purchased in 1920 by the Government of Bombay for the use of the College There are Training Colleges for Teachers of both sexes

Sixty yds. from the D.B is an obelisk to the memory of Mr St John Thackeray, Principal Collector and Political Agent, Southern Mahratta Doab, killed in the insurrection at Kittur, 23rd October 1824, and of Mr J C. Munro, Sub-Collector, who died of wounds received at the reduction of that place Thackeray was an uncle of the novelist

Dharwar is connected by a metalled road (105 m.) with Karwar (D.B.K.) on the sea-coast, hdqrs. of the Bombay district of North Kanara; there are four D.Bs. on the road, which crosses the Sahyadri range (Western Ghats) by the Arbail pass, 12 m S. of Yellapur (D.B.), 55 m. from Karwar. The road runs through Hubli (12 m.).

44 m. S. of Dharwar was the fortress of **Bankapur** (Shahabazar), commanding the road from Bhatkal and Honawar to Vijayanagar. The Bahmani minister, Mahmud Gawan, took it in 1471 There is a Jain Temple of Rangaswami here

Nargund is not easily accessible, but its compact hill-fort rising straight out of the plain is a conspicuous object on clear days from Dharwar to the N.E and from the Gadag-Hotgi Railway (Route 29) to the W The Chief in May 1858 murdered Mr Manson, Political Agent of the Southern Mahratta country, by night at a village N of Nargund and had his head affixed to the gate of the town The fort was stormed, the Chief taken and executed, and his State annexed The head of Mr Manson was buried in Bombay cemetery, a cenotaph being erected in Nargund

334 m **Hubli** junction (R., Dist B and D.B)., a centre of the cotton trade, contains the workshops for the metre-gauge rolling stock of the M and S M. Railway system A criminal settlement is managed by the American Baptist Mission A line runs E to (37 m.) Gadag jn., for Hospet, Bellary, and Guntakal Jn. (Route 30).

400 m. **Ranibennur** was taken by Col. Arthur Wellesley in 1800, in punishment for having been sniped 2 m. S. is the Chol Marali or Scorpion Hill

415 m. from Poona is **Harihar** station (R.), on the right bank of the Tungabhadra, boundary of the

[1] The term "Karnatak" (Carnatic) is applied in the Bombay Presidency to the three Kanarese-speaking districts of Dharwar, Bijapur and Belgaum.

Mysore State. Good D.B. The railway bridge was constructed in 1885, the road bridge in 1868. An inscription on copper has been found here of the 7th century, and there are several of the 12th. The temple of Shri Harihareswara was erected in 1223. In 1268 additions were made by Soma, the founder of Somnathpur in the Mysore District (p. 592). At Harihar General Wellesley concentrated his troops to restore the Peshwa in 1803. Amachini Tool Factory was started in 1942.

424 m. **Davangere**. A centre for cotton, grain, and ground nuts.

453 m. **Chik Jajur Jn.** Branch, 21 m. N.E., to Chitaldrug (D.B.K.; alt. 2884 ft.), which is a cotton trade centre and possesses a fortified hill, taken by Hyder 'Ali in 1776. Chandravalli near by is an ancient place.

471 m. **Hosdurga Road** Stn. From here (32 m.) may be visited the great Marikanave Lake, formed by a dam, 1330 ft. long and 142 ft. high, across the Vedavali River, and covering 35 sq. m. There is a penstock with a fall of 60 ft. by the dam, close to which is a D.B. This work was inaugurated by Sir K. Seshadri Iyer, Diwan of Mysore (1885-1900).

495 m. **Birur** junction, branch line, worked by the Mysore Ry. to **Tarikere** junction, 16 m. (N.G. ry. to Narasimharajapura, 27 m.), **Shimoga**, 38 m. (R., D.B., alt. 1898 ft.), and Anandapuram (74 m.). Motor services (S.) from Shimoga, N.E. to Harihar (see above), and S.W. through forests to Agumbi and Mangalore (see p. 642).

28 m. At **Bhadravati** station, on the banks of the Bhadra river, 12 m. from Shimoga, the Mysore Iron and Steel Works produce iron castings and pipes, steel ingots, acetate, tar products and refined alcohol. The wood distillation plant is unique in India. The works were started in 1923 with power from Sivasamudram.

Shimoga is the most convenient starting-point for the **Gersoppa** or **Jog Falls** of the Shiravati, distant 62 m., the stages, each with a R.H., being Ayanur (15 m.), Anantapur (15 m.), Sagar (15 m.), Talguppa (10 m.), Gersoppa Falls. There is a regular motor-bus service; and on previous intimation to the Proprietor, Motor-bus Service, Shimoga, a motor-car can be hired with halting charge. Supplies must be taken for the journey. The road passes through much fine bamboo and tree forest. Some miles above the falls the road to the Mysore bungalow (permit from Dept. Commr., Shimoga) on the left bank turns down to the Shiravati ferry, across a broad, deep stream flowing between high wooded banks, while the main Honavar road continues, branching off to the Bombay, or Jog, bungalow (permit from Executive Engineer, Kanara Dist., Karwar) at Kodkani, on the right bank close to the Raja Fall.

There are in all four falls, which have been called the Raja or Horseshoe, the Roarer, the Rocket, and La Dame Blanche. In the *Horseshoe* the water in considerable volume leaps sheer down a height of 829 ft., measured by line, and falls into a pool 132 ft. deep. The spectator can look right down into this abyss. In the next, the *Roarer*, the water rushes foaming down a tortuous channel into a cavern or cup, which turns it into the rift of the Raja below. The name given to the third fall, at a little distance to the S., the *Rocket*, is very appropriate. It continually shoots out in jets of foam, which burst like fire-rockets into showers of glittering drops. The *Dame Blanche*, nearest the S.

end of the cliff, streams in a succession of lace-like cascades over the sloping surfaces of the rock wall underneath it. The finest view is that from the Mysore side, as from it the black chasm into which the Raja and Roarer leap and pour is fully seen, as well as the curving face of the cliff down which the Rocket and Dame Blanche shoot and stream. A particularly fine view is that from Lady Curzon's seat and Watkin's platform to the W of the Mysore bungalow; and no one should fail to make the expedition to the foot of the falls, though the paths are steep for returning. The whole of the deep recess into which the waters are hurled is covered with fine trees and dense undergrowth (full of leeches!), and the river disappears to the W between the dark walls of a gorge. In the dry season the amount of water in the falls becomes very small, and in the rains the whole of the recess may be shrouded in thick impenetrable mist. The best time for a visit is early in the cold weather, as soon as the rains have ceased.

The Queen of Gersoppa, called by the Portuguese the *Rainha da Pimenta*, or Pepper Queen, was a great dignitary in the 17th century. Her subjects were chiefly Jains, by whom the nearest village to the falls is at present almost entirely inhabited. Among the ruins of the city are two ordinary Jain temples.

513 m. from Poona, **Banavar** station.

The renowned ruins of Halebid (below) lie 18 m. S.W. from this point by motor-bus (S), past *Jyavagal* (12 m.). 10 m. beyond in the same direction is *Belur*. The circuit may be continued to Hassan (24 m.), and Chennarayapatnam (18 m.), for Sravana Belgola (8 m.), and from Chennarayapatnam to Arsikere Ry. Stn. (32 m.). Hassan is on the branch line from Arsikere (p. 588) to Mysore City. Motor-bus services (S) between Belur and Hassan, and between Hassan and Sakleshpur, where there are coffee and cardamom estates.

At **Jyavagal** there is a temple dedicated to Narsingh, and built entirely of *balapam*, or pot-stone. "It is highly ornamented after the Hindu fashion, and on the outside every part of its walls is covered with small images in full relievo."

Halebid[1] (R.H.), named from the Kanarese words *hale*, "old," *bidu*, "capital," is on the site of Dwarasamudra, the capital of the Hoysala Ballala Kings, a dynasty traditionally founded by Sala in 1006. Vishnuvardhana (1111-1141) was ardently religious, a conqueror, architect and builder of Halebid. The dynasty seems to have ended with Ballala IV in 1343. Halebid was rebuilt in the middle of the 13th century by Vira Someswara, and some inscriptions represent him to be the founder. Attacked by leprosy, he withdrew to the neighbouring Hill of Pushpagiri ("Mountain of Flowers"), where he was instructed to erect temples to Siva to obtain a cure. The Muslims under General Kafur from Delhi took the city in 1310, and plundered it. In 1326 another army of Muslims destroyed the city. The Raja then removed to Tonnur, then a flourishing city (3 m. N. of French Rocks station, p. 593).

There are two most remarkable temples remaining. The northernmost of these, the **Kedaresvara**, is the smaller of the two. A tree took root in the vimana, or tower, over the sanctuary, and, dislodging the stones, rendered much of the temple a heap of ruins.

[1] See Fergusson's *Ind. Arch.*, 1, 444.

The temple was star-shaped, with sixteen points, and had a porch that from base to top "was covered with sculptures of the very best Indian art," possibly over elaborate

The second temple, the **Hoysaleswara** ("Lord of the Hoysalas"), stands on a terrace, 5 ft 6 in in height, paved with large slabs The temple itself is 160 ft from N. to S by 122 ft from E to W, and beyond its walls there is a clear margin of platform all round of about 20 ft The height from the terrace to the cornice is 25 ft It is a double temple, one half being sacred to Siva, and the other to his wife Each half has a pavilion in front containing the *Basava*[1] *Nandi*, or bull The larger of the two is 16 ft long by 7 ft broad and 10 ft high, the animal being represented kneeling

Some of the pillars in the inner part of the temple are of black hornblende, and have a dazzling polish Fergusson says "Some of these friezes are carved with a minute elaboration of detail which can only be reproduced by photography, and may probably be considered as one of the most marvellous exhibitions of human labour to be found even in the patient East" He adds: "Here the artistic combination of horizontal with vertical lines, and the play of outline and of light and shade, far surpass anything in Gothic art In the friezes which surround the building the succession is always the same, the elephants being the lowest, next above them the *shardulas* (or conventional lions), then the horses, then the oxen, then birds. Fergusson places Halebid Temple and the Parthenon as the two extremes of architectural art. There is a group of extremely beautiful **Jain Bastis** at the farther end of the village

[1] Basava was founder in the 12th century of the Lingayat Saivite sect in S and W India. The members, who are vegetarians, admit the equality of women with men, allow widow marriage, and disregard Brahman sanctity.

Belur (or Baillur) (R H.), 24 m. from Hassan (cars available), stands on the right bank of the Yagachi In the Puranas and old inscriptions it is called Velapura, and is styled the Southern Benares. The famous temple of Chenna Kesava was erected and endowed by the Hoysala King, Vishnu Vardhana, on exchanging the Jain faith for that of Vishnu about 1133 The carving rivals that of Halebid, and is the work of the same artist, Jakanacharya

The image of the god is said to have been brought from the Baba Budan Hills (N W, rising to a peak 6317 ft), known in Puranic times as **Chandradrona**, or Crater of the Moon, and a place of pilgrimage for both Hindus and Muslims They lie 10 m from Chickmagalur (bus service) and there are coffee estates in the hills The image of his goddess Mahishashura-mardin was left behind, which obliges him to pay her visits.

The *Great Temple*, within a high wall which surrounds a court 440 ft by 360 ft, has on the E front two fine gopurams In this court are smaller shrines. "The Great Temple," said Fergusson (*Ind. Arch.*, 1, 439), "consists of a very solid vimana, with an *antarala*, or porch; and in front of this a porch, or **maha-mantapam**, of the usual star-like form, measuring 90 ft. across. . . ." The windows to the porch are twenty-eight, all different. Some are pierced with star-shaped conventional patterns, and with foliaged patterns between. Others are interspersed with mythological figures, as the Varaha Avatar. The base is very richly carved,

and is supported on a frieze of elephants. "The amount of labour which each facet of this porch displays is such as never was bestowed on any surface of equal extent in any building in the world" The Sri Ramakrishna (*Hindu*) Mission temple is modern

523 m. from Poona, **Arsikere** junction (R.). There is a beautiful temple here, built by Ballala II (end of the 12th century A.D.) Branch (opened 1918) of Mysore Railways to Hassan (R.), 29 m. and to Mysore City, 103 m. (p. 597) From Hassan (alt 3094 ft.) there is a motor service to Belur

32 m. S. from Arsikere is the ancient town of *Chennarayapatnam* From here

8 m. S.E. again is **Sravana Belgola** (white lake), a centre of Digambara Jains Bhadra Bahu, a sage who died here in the 4th century B.C., was a *Sruta kevala*, or immediate "hearer," of the six disciples of Mahavira, founder of the Jain sect His attendant is said to have been the famous Mauryan Emperor Chandragupta, or Sandracottus, who abdicated to live the life of a recluse with him This is confirmed by inscriptions on the rock of very great antiquity Asoka, the grandson of Chandragupta, is said to have visited the spot with an army

Near the town are two hills —*Indrabetta* or Vindhyagiri or Doddabetta and *Chandragiri* or Chikkabetta.

On Indrabetta, reached by a steep flight of steps going straight up the rock (470 ft.) is a colossal[1] statue (*c.* 983 A.D.) of Gomata Raya, 70 ft. 3 in. It is nude, and faces the N. The face has the calm look usual in Buddhist statues. The hair is curled in short spiral ringlets all over the head. From the knees downwards the legs carved in relief on the rock are unnaturally short, the feet rest on a lotus Ant-hills rise on either side, with a creeping plant springing from them which twines round the thighs and arms These symbolise the deep abstraction of the sage The stone looks as fresh as if newly quarried, owing to its being profusely anointed at intervals of 25 years Within the enclosure are 72 small statues, of like appearance, in compartments An inscription on the front of the colossus states that it was erected by Chamunda Raya. The most interesting inscriptions (see *Epigraphia-Karnataka*, by Rao Bahadur R Narasimhacharya) are cut in the face of the rock at Indrabetta in ancient characters 1 ft high

On Chandragiri (220 ft high) there are fifteen Jain temples in clusters (Bastis) and a number of stone lamp shafts The monastery (W.) contains many mural paintings

583 m. from Poona, **Tumkur** station (R.) 10 m. N.E. is a health resort on the Devarayadurga hills At Kunigal, 24 m. S., connected by motor-bus (S), is a Mysore Government stud farm.

626 m. **BANGALORE City** ✱ junction station (alt. 3000 ft.). Railways run S.W. to Mysore City (Route 32 (*a*)); N. to Guntakal and Secunderabad (Route 30), and E. to Bowringpet and Jalarpet for Madras (Route 32 (*b*)).

[1] There are similar colossal images at Karkal and Venur near Mangalore (p. 640).

A loop N.G. ry. runs *viâ* Chikballapur and Kolar (p. 598) to Bowringpet. The Cantonment station lies 2 m. N E. of the city station The name is literally "the town of bengalu," a kind of bean. The State of Mysore, of which Bangalore is the capital, comprises an area of 29,326 sq m,

The State became independent after the fall of Vijayanagar was conquered by Bijapur (1637), and Bangalore became the jagir of Haidar Ali in 1758 The Wadiyar family was restored by Lord Wellesley after the fall of Seringapatam in 1799, in the person of the grandson of the deposed Prince, a child of five years of age The conduct of the Maharaja, Krishna Raja Wadiyar, and a rising in Bednur (1830) led to the resumption of the administration by a British Commissioner and four Superintendents in 1831, under treaty stipulation of 1799 In 1866 it was decided to recognise his adoption (1865) of Chama Rajendra as his heir Maharaja Krishna Raja Wadiyar died in 1868, and in 1881 the "rendition" of the State to Maharaja Chama Rajendra Wadiyar was carried out, the Cantonment area of 13½ sq m. being assigned to the British Government for military purposes only A peshkash or annual tribute of 35 lakhs was imposed, but 10½ lakhs of this was remitted in perpetuity in 1927 The Maharaja, an excellent ruler, died, aged 31, in 1894.

He was succeeded by the late Maharaja, Col. H H Sri Sir Krishna Raja Wadiar Bahadur, G.C.S.I., G.B E. (born 1884, received full powers August 1902, and died 1940). During his minority, his mother, H H. the Maharani Regent Sri Vani Vilasa Saunidhana, C I., carried on the administration with a Council of Regency, Sir K. Seshadri Iyer being Diwan. The next Diwan, Sir Krishna Murti, K.C.I.E., was descended from Diwan Purnaiya (p. 595). A Legislative Council was established in 1907, with a new Constitution in 1939 The present Maharaja is H.H. Sir Jaya Chamaraja Wadiyar Bahadur, G C B , G C S I

The **Cantonment** [1] and **City** of Bangalore (combined pop. 1941, 406,760) stretch from the Maharaja's Palace on the N , 6500 yds , to the Koramangala Tank on the S., and an equal distance from the *Petta* on the W. to the Sappers' Practice-ground on the E. Bangalore proper lies S of the Dharmambudhi and Sampangi Tanks, which lie in the N W. and E corners of the *Petta*, or town

In the Cantonment, from N W. to S E , the first building is the **Maharaja's** handsome **Palace.** 2 m N of the Palace is the **Indian Academy of Sciences** for post-graduate research (founded by the liberality of the well-known Parsi **Tata** family) which has attained a world-wide reputation. S E of this is the railway station, and S. again is *Miller's Tank*, which communicates with the much larger *Ulsoor Tank* on the E edge of the Cantonment.

N E are the suburbs of *Cleveland Town*, *Fraser Town*, and *Richards Town* (a modern extension) with a large factory of the Peninsular Tobacco Co St Xavier's (Roman Catholic) Church, a Wesleyan Church, and the (Anglican) Church of St John, are in Cleveland Town. In St John's cemetery is the grave of General J W Cleveland, who died in 1883 in his 92nd year, after a service of 75 years in the Madras Army The Regimental Centre of the famous Queen Victoria's Own Group, Royal Indian Engineers, adjoins

[1] Morris's Guide to Bangalore can be recommended

the village and large tank of *Ulsoor*.

S of the Sapper lines are the British Infantry Barracks, and then in order along the N side of the great Parade-ground, St Andrew's Kirk, built 1864, the Main Guard, the Y M C A, the Bowring Civil Hospital, and the Lady Curzon Women's Hospital. Directly S of Ulsoor are the Artillery Barracks, and S again of them the Cavalry Barracks, the old Cemetery, the Mounted Parade, the Artillery Practice-grounds, and Y M C A buildings, the foundation-stone of which was laid by Lord Hardinge.

Trinity Church (Anglican) contains a half-length statue in white marble, by MacDowell, R A., to General Clement Hill, who served through the Peninsular campaigns under his brother Lord Hill, and when commanding the Mysore Division died on the 20th of January 1845 while on a pleasure trip to the Falls of Gersoppa. W of Trinity Church are the *Wesleyan Chapel*, the Public Offices, *Mayo Hall*, which contains the municipal office, and the *Gymkhana*, standing in the General Parade-ground, which is more than 1 m. long from E. to W. A little S. of its centre is St Joseph's College, and S E the *Roman Catholic Cathedral* and *All Saints' Church*.

At the W end of the Grand Parade-ground is *St Mark's Church*, in which is a tablet to Lieut.-Col. Sir Walter Scott of Abbotsford (the second baronet), who died at sea in 1847, aged forty-six. The tower fell but has been rebuilt. To the W of this is the *Cubbon Park*. In this are the Museum (1865) and the Sir Seshadri Memorial Hall, where the Mysore Government Public Library is located.

In the vestibule of the Museum is a slab with twelve Persian distiches, brought from Tipu's Palace in the fort, also a relief of Seringapatam in 1800. In the large room adjoining there is a collection of geological specimens. Upstairs are stuffed animals, butterflies, Indian ornaments and dresses, and a most remarkable collection of fishes.

North-East is the Memorial Statue of the Queen-Empress, unveiled by King George, then Prince of Wales, in 1906. Farther N is a statue of King Edward, and W is a building 525 ft. long (1868) which contains the Mysore Govt *Public Offices*. In front is a statue of Sir Mark Cubbon, Commissioner of Mysore from 1834 to 1861. He died at Suez after a service of 62 years in India. The **Residency** is about ¼ m N of the Public Offices.

The city of Bangalore proper has an area of 11·8 sq m. The **Petta**, as it is called, was until 1898 surrounded by a deep ditch and thorn hedge. There is an excellent market between the Fort and Mysore Gates. The grain-market, *Taragu-petta*, and cotton market, *Arale-petta*, present busy scenes. Fruit and vegetables are sent to Madras and Bombay.

The **Fort** is due S. of the Petta. Rebuilt in stone in 1761, it is 2400 ft. from N. to S. and 1800 ft. from E. to W., of an oval shape, with one gateway remaining—the Delhi Gate, built of cut granite, on the N face opposite the Petta. When Lord Cornwallis, on the 21st March 1791, determined to storm the place, there were five powerful cavaliers (Wilks, *Historical Sketches of the S. of India*, 3, 123), a faussebraye, ditch, and covered way, but in no part was there a perfect flanking defence. The garrison, however,

consisted of 8000 men under Bahadur Khan, and there were besides 2000 regular Infantry in the Petta and 5000 irregular. In addition, Tipu himself, with an army far superior in numbers, was prepared to take advantage of any error The Petta, outside the Fort, had been previously taken by the British on the 7th of March, The assault took place at eleven at night, and until the Kiladar fell a determined resistance was made Tipu's camp that night was at Jigni, 6 m. to the S.W., and at nightfall he moved up within 1½ m of the fort, but the fort was captured, after a severe struggle, in a few hours

In the centre of the fort is the arsenal, and some remains of *Tipu's Palace* There is a small temple near the Mysore Gate The ramparts of the walls deserve a visit Outside the N W corner of the fort is the Victoria Hospital, maintained by the State. To the W. is the Minto Ophthalmic Hospital and a hospital for women and children

1½ m to the E of the Petta and fort is the **Lalbagh**, a garden said to have been laid out in the time of Hyder 'Ali, with tropical and sub-tropical plants

In consequence of the former prevalence of plague in Bangalore many modern extensions have been built S W, S.E., and N W., viz, Chamarajapet, Basavangadi, Sankarapuram, and Malaswaram, Visvesvarapuram, Gandhi Nagar and Seshadripuram

New and imposing buildings add lustre to "The City Beautiful"

ROUTE 32.

BANGALORE to

(*a*) **Falls of the Cauvery, Seringapatam, and Mysore City, and**

(*b*) **Bowringpet (for Kolar Gold Fields), Jalarpet Junction, Vellore, Arcot and Arkonam** Junction (for **Madras**).

(*a*) The Falls of the Cauvery, Seringapatam and Mysore City

A metre-gauge line of the Mysore State Ry, which has a London office in Grand Buildings, runs S W from Bangalore to (86 m) Mysore City It was opened in 1882

28 m **Closepet** (D B K, to Indians *Kalispet*) is named after Sir Barry Close, the first British Resident in Mysore from 1799 to 1801 It was founded in 1800 by the Diwan Purnaiya (p 595) to secure the road which passed through dense jungle The place is also known as Ramgiri from the neighbouring hill

36 m **Channapatna** station, noted for lacquer ware and steel strings for musical instruments. Two large Muslim tombs N. of the town, one of the religious preceptor of Tipu

46 m. **Maddur** station (R., D B.), once headquarters of a Vijayanagar Viceroy, suffered heavily during the wars with Tipu Sultan. There are two large Vaishnava temples here, sacred to Narasimha Swami and Varada Raja, the "Man-Lion" and the "Boon-giving King" A brick bridge with seven arches, built in 1850, spans the Shimsha, on the right bank of which the town is built. A road runs 150 m. to Coimbatore.

Regular bus services run to Sivasamudram (30 m., see below) from Maddur station.

By road 14 m. S. is **Malvalli**, (D.B.). The Mysore - Bangalore and Maddur-Sivasamudram roads cross at this place. On the 27th of March 1799 General Harris defeated the army of Tipu Sultan here. The left wing of the British was commanded by Colonel Arthur Wellesley, afterwards Duke of Wellington.

12 m. S.W. of Malvalli is the village of **Somnathpur**,[1] famous for the temple of Prasanna Channa Kesava. The temple is a star-shaped building, attributed to Jakanacharya, the famous sculptor and architect of the Hoysala Kings. The three pyramidal towers or vimanas over the triple shrine are completely finished. The central shrine is that of Prasanna Channa Kesava, that on the S. is sacred to Gopala, and that on the N. to Janardhana. Round the outer base are carved with dexterity incidents from the Hindu Epics. The end of each scene is indicated by a closed door. Around lie seventy-four mutilated statues, which once stood on the basement. There is a fine inscription at the entrance, which declares that the building was *completed in 1270 by Soma*, a high officer of the Hoysala State and a member of the royal family. Ruins of a large Saiva temple bear inscriptions, deciphered in *Epigraphia Karnataka*.

From Malvalli the road leads S. 12½ m. to

Sivasamudram. 3 m. N. of the Cauvery the road turns off to the E., and conducts to the Cauvery Falls Electric Power Station, beyond the Gagana Chukki Fall. The Cauvery divides into two branches, embracing the Sivasamudram Island, about ¾ m. above the point where the main road reaches it. This island was connected with the left shore by a bridge (destroyed and rebuilt upstream), at the farther end of which is situated a R.H. (permit from the Supt., Power Station). From a curved regulator the channel leading to the penstock chamber takes off on the left. From the right bank the main road turns to the S. point of the island, where a similar stone bridge, the Kollegal Bridge, makes connection with the right shore in the Coimbatore District. At this point also is a regulator, by which the whole water of the stream can, if necessary, be diverted into the Western channel.

The river turns sharply above the head of the island, and flows from S. to N. past it, turning again to the E. at the junction below the Falls. These are known as the Bar Chukki Fall, on the right arm, and the Gagana Chukki, on the left arm; the former is 1¾ m. from the R.H., and the latter 2¼ m.

The height of the Falls is 320 ft., but hardly any one of the many shoots has such a clear leap. They are spread over a considerable face of rock, and in the case of the Gagana Chukki (Western branch) and its Falls, curve round considerably to the left front. The foot of the Bar Chukki Fall can be reached by a long flight of slippery stone steps. The descent to the Gagana Chukki is possible on the W. bank only. On the E. bank, in front of it, are some Muslim buildings. A cloud of

[1] See Fergusson's *Ind. Arch.*, 1, 437.

spray constantly rises from the pools below them, and at a distance may be observed overhanging the head of the Falls The ordinary monsoon discharge is 18,000 cubic ft per second, but the discharge of a high flood has been known to be 200,000 cubic ft. On the left bank, in front of the Gagana Chukki, steel pipes, or penstocks, carry the water down a vertical height of 400 ft to the generators, which were in 1935 able to deliver 46,000 electric h p at the end of the receiving line, 93 m. distant, in the Kolar Gold Fields (p 598) The scheme was initiated by Diwan Sir Seshadri Iyer, and carried out by Col. Joly de Lotbiniere, R.E, C B, C S I, C I E (in 1900-2), for 6000 k w It is still being enlarged

56 m **Mandya** station The Mysore Sugar Coy manufactures sugar (1400 tons a day) and denatured spirit since 1933.

75 m **French Rocks** station, the place where French officers in the service of Hyder 'Ali and Tipu Sultan were stationed from about 1780 The name is properly Hirode The fort, 2882 ft above the sea, is 3 m N of the railway station.

77 m from Bangalore is **SERINGAPATAM** stn (D B.K.), inside the fort, which is built at the W. end of an island 3 m. long in the Cauvery River, 2412 ft. above sea-level, a suburb of Ganjam is on the W. The name is derived from a temple of Vishnu Sri Rangam, which is of much higher antiquity than the city.

Seringapatam [1] has a bad reputation for fever, and should be visited from Mysore (9 m.), or a car can be ordered by telephone for the tour By permission of the Darbar the hot hours of the day can be spent at the Darya Daulat Summer Palace.

In 1133 Ramanujachari, the Vaishnava reformer, fled to Mysore from the Chola Raja, and converted from the Jain faith Vishnu Vardhana of the Hoysala Ballala dynasty The royal convert gave him the province of Ashtagrama, including Seringapatam, over which he appointed officers called Prabhus and Hebbars In 1454 the Hebbar Timmana obtained from Sri Krishna Devaraya of Vijayanagar the government of Seringapatam, with leave to build a fort there His descendants governed till Sri Rangaraya of Vijayanagar appointed a viceroy, the last of whom was Tirumala Raja, who in 1610 surrendered his power to Raja Wadiyar, Seringapatam then became the capital of the Mysore Rajas, and of Hyder and Tipu, till the fort was stormed by a British army Mysore City became the capital, and Bangalore from 1831.

The Fort had double ramparts and ditches, the northern, the longest, face being just a mile in extent. The breach by which it was stormed on 4th May 1799 lies only a short distance to the S.W. of the railway station, beyond a ruined mosque. On the right is an obelisk erected by the Mysore Government in 1907 in commemoration. On the S shore two cannons, buried upright, mark the line from which the assaulting column advanced. From the breach the route round the W. end of the defences should be followed, as it affords fine views.

[1] An excellent account of the place has been written by the Rev E. W. Thompson, Mysore (obtainable from the Christian Literature Society).

Just across the railway line on the N. side is the dungeon in which the captives from Pollilore (see p 622), including David Baird, were imprisoned. A marble tablet indicates the spot, which is reached by descending a flight of steep and narrow steps S of this is the Sri Ranganatha Swami Temple, and considerably to the E, across the open space which was once the Parade-ground, is the Gangadhareswara Temple, with a storehouse of State Sandalwood (monopoly) to the S. of it, occupying the site of Tipu Sultan's Palace

N.E of this is the Water Gate, outside of which is a very picturesque enclosed space between walls with many stone idols and reliefs of serpents under banyan-trees. On the right of this space is the spot where Tipu Sultan fell, and outside it upon the river-bank is a bridge over the fort ditch and a ghat built in memory of Maharaja Krishna Raja Wadiyar.

S.E., and facing the Ganjam Gate, is the Masjid-i-Ala, with two lofty minarets Outside, to the N E of the Ganjam Gate, is the Darya Daulat Palace, and E. of it, at a distance of nearly 2 m., is the Lalbagh, with the mausoleum of Hyder 'Ali and Tipu Sultan Just outside the Fort is the Scott bungalow, which with its furniture has been preserved by the Mysore Govt. from the time of an (unsubstantiated) tragedy in 1817 when Col. Scott (Commandant of Seringapatam) drowned himself on returning to find his wife and daughter dead from cholera

The first siege of Seringapatam was in 1792. Lord Cornwallis had appeared before the place on 13th May 1791, after the capture of Bangalore, but was compelled by want of transport to fall back, destroying his battering train. In February 1792 the attack was made from the N.W side of the fort from French Rocks, where an army of 19,000 European and 29,000 Indian troops, with 400 guns and a large force of Mahratta and Hyderabad Cavalry had been assembled under Lord Cornwallis.

Outside the fort on the N of the Cauvery a "bound hedge" of cactus and thorn enclosed a large space That on the N was 1 m to 1½ m deep by 3 m long along the river, and was defended by six redoubts In a night attack on 6th February the British got a footing on the island and nearly entered the fort with the fugitives Trenches were then opened, and, General Abercrombie having arrived with 9000 additional troops from Bombay, Tipu Sultan decided to submit, on 23rd April, surrendering half his territories to the three allies. The handing over of two of his sons, aged 10 and 8, as hostages, one condition of peace, has supplied a subject for several pictures by English contemporary artists.

The second siege commenced on 17th April and ended on the 4th of May 1799. The forces under General Harris arrived S W of the fort on 5th April, and were joined by the Bombay troops under General Stuart on the 14th By the 27th April the enemy had been driven out of the whole outer zone of defence. By the 3rd May a practicable breach had been made in the walls, and this was attacked by a strong force of 4331 men (2494 British and 1887 Indian) under General Baird at 1 o'clock in the afternoon (4th). The defenders were taken by sur-

prise, and the troops, having surmounted the outer wall within seven minutes, turned right and left along the deep inner ditch.

Tipu Sultan, awakened, who had hurriedly proceeded to the point of the breach, found himself cut off, and therefore fell back along the N wall, seeking to regain the Palace from that side In front of the inner wicket gate there he was severely wounded and placed inside a palanquin, but meanwhile the wicket had been seized by the besiegers As he lay disabled outside it a European soldier attempted to snatch off his jewelled sword-belt, and, being wounded by the Sultan, shot him through the head

His two sons, formerly hostages, then surrendered, and next day the eldest son, Fateh Haidar, who was commanding a force outside the fort, surrendered also The reserve on the occasion of the assault was commanded by Colonel Wellesley, who became Commandant of the place and the troops left in it. The evening after the assault was ushered in by a storm of extraordinary violence Tipu Sultan was buried next day in the Lalbagh Mausoleum with military honours His sword is in the Indian Museum, S Kensington

The island is connected with the N. bank of the Cauvery by the Wellesley Bridge and with the S bank by the Periapatnam Bridge, on stone piers An inscription on the Wellesley Bridge records that it was built between the years 1802 and 1804 and dedicated to Richard, Marquess Wellesley by the Diwan Purnaiya, the Prime Minister, who served with equal loyalty Hyder 'Ali, Tipu Sultan, the British and the restored ruler, from 1799-1811, and who died at Seringapatam in 1812

Beyond the Periapatnam Bridge is a canal, and following the left bank to the W. the visitor passes along the outer zone occupied by the defenders in the siege of 1799 Close to the bridge was Wallace's Post, captured on 26th April. Half a mile from it are the guns opposite the breach, and beyond these again is MacDonald's Post Just S of the canal is a very sacred Hindu temple at a Sangam or junction of rivers The island was evacuated on account of its unhealthiness in 1811

The **Darya Daulat Bagh**, a Summer Palace of Tipu Sultan just outside the E side of the fort, is distinguished for the arabesque work in rich colours which covers it The W wall is painted with a representation of the victory of Hyder 'Ali over Colonel Baillie at Polliore, near Conjeeveram (see p 622) It had been defaced prior to the siege of 1799, but Colonel Arthur Wellesley, who made this garden his residence, had it restored. It was afterwards whitewashed, but Lord Dalhousie, visiting the spot, had it repainted by an Indian artist who remembered the original, The perspective is bad and the effect grotesque, but the painter has succeeded in capturing the expression and attitude of the British soldiers, and the Frenchmen are very lifelike

The **Lalbagh** is a garden 2 m E of the fort on the other side of the Ganjam suburb (which has a church of Abbé Dubois founded in 1800). It contains the mausoleum of Hyder 'Ali and Tipu Sultan, a square building surmounted by a dome, with minarets at the angles, and surrounded by a corridor which is supported by pillars of black hornblende, remarkable for its beautiful polish. The double doors of rosewood, inlaid with ivory, were given by

Lord Dalhousie. Each of the tombs is covered with a crimson pall. The whole is kept up by the Mysore State. The tablet on Tipu's tomb is in verse to this effect—"The light of Islam and the faith left the world Tipu became a martyr for the faith of Muhammad. The sword was lost and the son of Hyder fell a noble martyr." The chronogram gives the date 1213 A H =1799 A.D

In front of the Lalbagh is a memorial (1816) by Colonel John Baillie, then Resident at Lucknow, to his uncle, Colonel William Baillie, who died in 1782, a prisoner of Tipu Sultan, and the grave of 30 British soldiers of the 33rd (now the Duke of Wellington's) Regt who died while in garrison in 1799-1800 On the way to the garden, on rising ground near the road, are memorials of the officers and men of the 12th and 74th Regiments killed in action in 1799

In the garrison cemetery are graves of officers of the Regiment de Meuron, a Swiss proprietary regiment, first in Dutch and then in the service of the E. India Company, which took part in the second siege of Seringapatam, and was afterwards quartered on the island.

A remarkable arch, near the railway line, in brick and mortar, built in 1801 by de Havilland with a span of 112 ft., fell in 1937, after more than a century

86 m. from Bangalore is **Mysore** station *, 2493 ft. above sea-level (D.B K on N. side of town), the old capital of the State (pop 150,540). The city[1] is built in a valley formed by two ridges running N. and S The streets are broad and regular, and there are many substantial houses two or three storeys high, with terraced roofs. The town has a neat and thriving look, and much attention has been paid to the sanitation by the municipality The Mary Holdsworth Hospital (1906) is a memorial to a Wesleyan missionary who lived in and for Mysore.

To the E are the Summer Palace, the Chamundi Vihar, and the mansion of Col. Desraj Urs (brother-in-law of the late Maharaja) His eldest son is now Maharaja). To the W are the Public Offices, with a statue of Sir J Gordon (who served in Mysore from 1873 to 1886), the Maharaja's College, University buildings (1916), and the Maharani's College S of the town is the fort, a quadrangular, moated enclosure of some 450 yds., in front of it lie the Curzon Park, the Gordon Park, Nishath Bagh and the Hardinge Circle In the centre of the town are the Sri Krishnarajendra Hospital, the Chamarajendra Technical Institute, and the Lansdowne Bazar The British Residency until 1884, known as Government House, contains a very large room, without pillars, with a Madras terraced roof

The *Maharaja's Palace* (1897) in the fort faces due E. and replaces one partly burnt down. The general appearance and the outline are Indo-Saracenic; but the details of decoration are distinctly "Hoysala" The central tower is the dominating feature. The carvings and colour combinations are highly artistic. In the Sajje or Dasahara Hall the Maharaja shows himself to the people, seated on his throne, at the Navaratri festival

The throne is remarkable. According to one account, it was presented to the ambassadors of Chikka Deva Raja of Mysore in

[1] See *Mysore City*, by Constance Parsons (Milford, 1932).

1699 by the Emperor Aurangzeb (Wilks, I, 106). The Palace legend at Mysore is that it was originally the throne of the Pandus, and was found buried at Penukonda by the founders of the Vijayanagar Empire, who were told where it was by an ascetic. It was found in a lumber-room when Seringapatam was taken by the British, and was employed at the installation of the Wadiyar Raja It was originally of fig-wood overlaid with ivory, but the ivory has been plated with gold and silver carved with Hindu mythological figures. The magnificent new *Palace Offices* were constructed in 1925

The Govt Silk-Weaving Factory and Sandalwood Oil Factory will interest ladies A Zoo to the E of the City on the way to the race-course contains wild animals and birds

Chamundi, the hill which overlooks Mysore, is 2 m S.E. of the fort It is precipitous, and rises to 3489 ft above sea-level, an excellent road, suitable for motors, 5½ m long, leads to the top, on which is a temple Two-thirds of the way up is a colossal figure of Nandi, the sacred bull of Siva, 16 ft high, hewn out of the solid rock—a well-executed work of the date of 1659 A D Chamundi, family goddess of the Wadiyars, is a title of the goddess Kali (see p. 115) who killed two demons, Chanda and Mundi, on the hill. On the top is a residence of H H the Maharaja

For the motor journey by road from Mysore City to Bangalore, cars, single seats in buses only, can be obtained from the Mysore Railway Out Agency For the road to Calicut see p. 641

A metre-gauge line of the Mysore State Ry. runs from Mysore City to Hassan (29 m.) and (103 m.) **Arsikere** Junction (p. 588), where it connects with the M and S.M Ry. line from Hubli Jn. to Bangalore (Route 31). The first stn on this line after leaving Mysore City is **Belagula**, which is 3 m. from the Krishnaraja Sagar, a reservoir (49½ sq. m.) with a dam (1¼ m. long and 130 ft high) across the Kaveri and constructed to store water for irrigation purposes, and to maintain a continuous flow of water at Sivasamudram for generating electric power. The place is 10 m. by road from Mysore City. There is a good D B There are terraced gardens (Brindavan) below the dam with fountains, floodlit by night, and a "fairy land." The Irwin Canal passes through a tunnel 3200 ft long

102 m from Bangalore, **Nanjangud** (D B), has a temple 385 ft long by 160 ft broad, supported by 147 columns. It is one of the most sacred in Mysore, and enjoys a Government grant. There is a car-festival here in March, which lasts three days

124 m **Chamarajnagar** (alt 2825 ft)

Coorg (anglicised form of "Hodagu"), of which the capital town, **Mercara** (Mahadespet), 75 m W. of Mysore, is reached by a motor service. (Apply to Agent, Govt Motor Mail Service, Mysore.)

At Hunsur (Gadipotra) on the Lakshman Tirth river (27 m., R H, permit from the Amildar), are the headquarters of the breeding establishment of the famous Mysore bullocks (Hallikar and Amrit Mahal). With them Hyder 'Ali marched 100 m. in 3½ days to the relief of Chidambaram (p. 649) in 1781. Near Fraserpet, renamed after Col. Fraser,

the first Political Agent, 1834, the Cauvery is crossed. Haidar Ali heard here of the birth of Tipu and called it Khushalnagar

Mercara has an old fort, which was besieged by Vira Raja of Coorg in 1791, but he let Tipu's relief column in Coorg was overrun by Hyder 'Ali in 1773 and ravaged by Tipu in 1782-3 The capital was moved from Periapatam to Mercara in consequence The draft treaty of Seringapatam barred Tipu from Coorg and the West Coast He was unwilling to accept the clause, and preparations were made to resume the siege, but he consented and signed on 19th March 1792 The subjects of Vira Raja were maltreated and wished to come under British rule in 1834 The Raja surrendered the country to Colonel Fraser, and died in England, a political pensioner, in 1863 The Arms Act is not applied to the Kodagus in consequence, and they carry a knife similar to the Pathan knife They are a small and much intermarried race A Chief Commissioner administers the country (K Chengappa) since 1940 A Legislative Council was formed in 1923

The production of coffee has been much affected by the "borer" which necessitates growing under shade trees When a ton per acre was the usual out-turn, the planters kept a pack of hounds The climate is excellent except during the rains, when 100 inches fall at the top, and perhaps 400 inches on the slopes, of the Ghats The lantana or wild heliotrope, introduced to fence the plantations, is thus encouraged to grow and to cover acres, harbouring many poisonous snakes.

Two roads divide at Fraserpet, where there is a bridge over the Cauvery, which rises in Coorg, near the peak of Brahmagiri, 5272 ft One road runs through Mercara, headquarters of the Province, down the Sampaghi Ghat (1840) to Cannanore. The other runs, with a branch to Pollibetta and the Planters' Club, through Virarajendrapet (named after the uncle of the last Raja) down the Periambadi Ghat (1852) to Tellicherry. There is a D B at Wattekuli and mahsir-fishing at the bottom of the ghat

(*b*) Bangalore City to Bowringpet, Jalarpet Junction, and Arkonam Junction (for Madras).

Communication between Bangalore and Madras City is made by a broad-gauge line (222 m.) of the Madras and S Mahratta Railway, opened 1864

35 m from Bangalore, **Nandi**, on the narrow-gauge loop to Bowringpet, station for Nandidrug (see Route 30, p 583)

28 m **Paykal** station There are two outcrops of Puranic interest From quarries here granite is exported.

44 m. from Bangalore city is **Bowringpet** (called after a former Chief Commr of Mysore) junction for the broad-gauge Kolar Gold Field Railway to Ooregaum and Marikuppam (10 m.), and for the Kolar District Railway, loop (102 m) to Bangalore City The Gold Field (pop 133,859) begins 8 m. from Bowringpet There are four Companies at work on the Field, under the management of Messrs John Taylor & Sons of London. Since mining on modern principles was begun on the Field in 1882, the mines have yielded gold to the value of hundreds of millions sterling. The mines are supplied with electricity for all purposes by the Cauvery Falls Power Works (p. 592) Some of the mines are 8000 ft. deep.

89 m. **Jalarpet**; junction with the broad-gauge line of the S. Indian Ry. to Mangalore (Route 35).

109 m **Ambur**, with a barrier fort.

141 m. from Bangalore is **Katpadi** junction (R.)

From here (1) a M.G. branch of the S.I. Ry. runs past Vellore (7 m.) to (100 m.) Villupuram junction for Pondicherry (p. 645, Route 36), and (2) a M.G. branch of the M. and S.M. Ry. runs N. to (21 m.) Chittoor, Pakala, Tirupati (64 m.), and (71 m.) Renigunta (Route 26, p. 531).

Vellore Town (alt. 689 ft.), headquarters of the N. Arcot District, is 5 m. S. of Katpadi Stn., on the opposite bank of the Palar river, which is spanned by a brick road bridge and a railway bridge 2058 ft. long (1891).

The **Fort** of Vellore was occupied by Narsingh Raja of Vijayanagar about 1500 A.D., and was the capital (1744) of Murtaza Ali, son-in-law of Dost Ali. It is a perfect specimen of military architecture.[1] The design suggests the work of Italian engineers, but local tradition ascribes it to Bommi Reddi, who came from the Kurnool district.

A main rampart is broken by round towers and rectangular projections, and is surrounded by a moat. The old entrance was by a winding roadway with massive gates across a drawbridge. On the S. is a sally-port approached by a footpath which crosses the ditch by a stone causeway. Within the fort is a parade-ground fringed by buildings. Noticeable among these are the great mahals or double-storeyed lines of rooms built round large courtyards. The Madras Europeans were besieged by Haidar Ali from 1780-2.

The **Temple**, which is likewise in the Fort, contains no image and may be entered freely by Europeans. The gateway is surmounted by a seven-storeyed *gopuram* of blue granite, 100 ft. high, and flanked by two dwarpals. The door is of wood studded with bosses of iron like lotus flowers. The entrance under the gopuram is lined with pilasters ornamented with circular medallions containing groups of figures. On the left of the gopuram inside is a stone pavilion, called the *Kalyana-mandapam* (marriage of the gods), exquisitely carved. On either side of the steps ascending to the mandapam are pillars, which are monoliths, carved to represent various animals and monsters, one above another. In the portico or ante-chamber is a carved ceiling, with a centre-piece representing a fruit, round which parrots are clustered in a circle, hanging by their claws with their heads down towards the fruit; the several richly-carved pillars of the interior are all different from each other. Fergusson said,[1] "The traditions of the place assign the erection of the Vellore porch to the year 1350, and, though this is perhaps being too precise, it is not far from the truth." A corridor runs round the enclosure, supported by ninety-one pillars, all with carvings on them. There is a plain mandapam at each corner of the enclosure, corresponding to the Kalyan mandapam. The inner temple is a dark, low building opposite the gopuram, it is entered from the N. side.

The Sepoy **Mutiny** at Vellore in 1806 was due primarily to injudicious orders of Sir John Cradock (afterwards Lord How-

[1] There is an excellent illustration of the Vellore Fort in Mr J. C. Molony's *Book of South India* (Methuen, 1926), p. 186.

[1] *Ind. Arch.*, 1, 396.

den), the Commander-in-Chief in Madras, which prohibited the wearing of beards and caste-marks by the sepoys The garrison consisted of 380 British soldiers of the 69th Regiment[1] and 1500 sepoys. On the morning of 10th July the sepoys, led by the Indian officers, shot down the British officers and penned the men of the 69th in their barracks, where 82 were killed and 91 wounded Escaping, the soldiers made their way to the rampart, and there, under the command of two young surgeons, Jones and Dean, held their own

An officer who lived outside had ridden post-haste to Ranipet Cantonment, 14 m away Colonel Rollo Gillespie turned out at once with a squadron of his own regiment, H M. 19th Dragoons and a troop of the 7th Madras Cavalry, ordering the galloper guns to follow Gillespie swarmed up the ramparts by a rope and took command of the defenders The guns came up, and blew open the gates. The cavalry dashed in, and the mutineers were killed almost to a man.[2] The 1st battalion of the 1st Madras Infantry and 2nd battalion of the 23rd Madras Infantry were re-numbered 24th M.I., but gallant conduct in 1817 restored the numbers.

In the old cemetery to the right of the entrance to the fort is a walled-in enclosure with a low sarcophagus inscribed to the memory of Lieutenants Popham and Eley and 82 soldiers of the 69th who fell during the mutiny Close by is the grave of Col. Fancourt of the 69th, but the burial-place is not known of Col M'Kerras of the 23rd M.I.

[1] Now the 2nd Batt. Welsh Regt.
[2] Sir H Newbolt's poem should be read.

¼ m. to the W. of the fort are the *Tombs of Tipu Sultan's Family* in a well-kept enclosure. Right of the entrance is the tomb of Padshah Begam, wife of Tipu Sultan, who died in 1834 A.D. The second tomb on the right is that of Aftab Khan, who was second instructor to the ladies. Then comes a handsome tank, with stone embankment and steps. Next are two plain tombs of female attendants, and then a handsome granite pavilion with a massive roof supported by four pillars; inside is a black marble tomb to Mirza Raza, who married one of Tipu Sultan's daughters At the end of these is the largest building of all—a domed mausoleum, 20 ft. sq., to the memory of Bakhshi Begam (the widow of Hyder 'Ali), who died in 1806 A D Left of this is a mosque without any inscription

The family of Tipu Sultan, State prisoners in the Fort, were removed to Calcutta after the Mutiny of 1806 and have resided there ever since The last King of Kandy was interned (1816) until his death in 1832.

157 m from Bangalore is **Walajah Road** junction for Ranipet (3 m) and Arcot (no station) The Palar River flows between these two, and is crossed by a stone causeway **Ranipet** was for many years a large cavalry Cantonment. It was built in 1771 by the Nawab of Arcot in honour of a Rani of Gingee (p 644), who performed *sati* on her husband's grave. There are many English tombs in the cemetery

Near Arcot (Arkát) a small pagoda is reached and portions of the town wall, which was of red brick. It was blown up by Tipu,

but the foundations remain. ¼ m. farther S.E., along the bank of the Palar, is the Delhi Gate, which is the only one that remains so far uninjured that it is possible to form an idea of what the fortification was Above the gate is *Clive's Room*. A road from here leads S into the heart of the old town, and in ¼ m to the *Taluk Cutcherry* After passing this building and turning E., the broad moat, which surrounded the citadel and is now dry with trees growing in it, is passed Here are two small tanks, which once had fountains in the centre, and near this is the *Makbara*, or *Tomb of Sa'adatullah Khan* In the same enclosure is the *Jami Masjid* The tomb has a stone inserted over the door with an inscription, which says that the Nawab died in 1733 A.D

W. of the Jami Masjid is the ruined *Palace of the Nawabs of the Carnatic*, on a mound overlooking the large lake called the Nawab's Tank. The walls of the darbar-room are still standing Opposite is the *Kali Masjid*, or Black Mosque, and near the Palace is the tomb of a Muslim ascetic To the W. is the mosque of Fakir Muhammad Near it is a tomb, apparently unfinished, in which was laid the body of the Subadar Nasir Jang, murdered in camp W. of Gingi on 5th December 1750, till its removal to Rauza (p 74) Just across the road is the tomb of Tipu Auliya, of brick whitewashed. In the W. wall is a stone with an inscription, which says that Sa'adatullah Khan erected this tomb for Tipu, who was a man of God. After this saint Tipu Sultan received his name

History.

When Zulfakar Khan, Aurangzeb's General, took the Mahratta frontier fortress of Gingi in 1698 A.D., he made Daud Khan Governor of the Carnatic, and this officer colonised the place with Muslims. In 1712 Sa'adatullah Khan, who first took the title of **Nawab of the Carnatic**,[1] made Arcot his capital. Arcot, however, is chiefly known for its glorious capture and defence by Captain Robert Clive, who here laid the foundation of his fame.

About the year 1736 Chanda Sahib, the minister of Ali Dost Khan, nephew and successor of Sa'adatullah, obtained possession of the Hindu kingdom of Trichinopoly. The Mahrattas in 1739 invaded the Carnatic. Ali Dost was killed in battle and his son Safdar Ali was murdered by his brother-in-law Murtaza Ali Two years later (1742) Safdar Ali's son was murdered at Arcot and the dynasty came to an end Muhammad Anwar-ud-din, who was appointed Nawab of the Carnatic by Nizam-ul-Mulk (1744). was defeated and killed by Chanda Sahib at the battle of Ambur in 1749. The Council at Madras set up his son Muhammad Ali as Nawab, and Chanda Sahib, with aid from the French, besieged him in Trichinopoly.

Clive led an expedition against Arcot in 1751 in order to divert a part of the enemy from the siege [2] Clive had with him only 200 British, with eight officers, six of whom had never before been in action, 300 sepoys and three field-pieces He left Madras on the 26th of August, and arrived at Conjeeveram on the 29th Here he learned that the garrison of Arcot amounted to 1100 men On the 31st he arrived within 10 m. of Arcot, and

[1] The Carnatic extended from the Kistna River to the Coleroon, and was bounded on the W by the present British districts of Cuddapah, Salem and Dindigal, which formed part of the State of Mysore.

[2] "Mr Clive, a volunteer, had the command given to him to attack a place named Arcourt." —*Contemporary News letter* (1751).

marched on through a tremendous storm of thunder, lightning, and rain. The enemy's spies reported the coolness with which the English advanced in these circumstances, and this made such an impression on the garrison that they abandoned the fort.

On 4th September Clive marched out against the garrison, which had taken up a position at Timeri, a fort 6 m. S. of Arcot. The enemy retreated to the hills, and the English marched out again on the 6th, and drove the enemy from a tank near Timeri. After ten days the enemy, who by reinforcements had grown to 3000 men, encamped within 3 m. of Arcot, where they were attacked at 2 A.M. on the 14th of September by Clive, and utterly routed. Two 18-pounders despatched from Madras had now nearly reached Clive, who sent out all the men he had, except 30 Europeans and 50 sepoys, to bring them in. During this emergency the enemy attacked the fort, but were signally repulsed.

Chanda Sahib thereupon sent 4000 men from Trichinopoly under his son Raja Sahib, who entered the town of Arcot on the 23rd of September. On the 24th Clive sallied from the citadel and fought a desperate battle with Raja Sahib's force. On the 25th Murtaza 'Ali brought 2000 more men from Vellore to join Raja Sahib.

Clive's situation appeared desperate. "The fort was more than 1 m. in circumference" (*Orme*, book 3, p. 198), "the walls were in many places ruinous, the rampart too narrow to admit the firing of artillery; the parapet low and slightly built, several of the towers were decayed, and none of them capable of receiving more than one piece of cannon, the ditch was in most places fordable, in others dry, and in some choked up; there was between the foot of the walls and the ditch a space about 10 ft. broad, intended for a faussebraye, but this had no parapet at the scarp of the ditch. The fort had two gates, one to the N.W., the other to the E., both of which were large piles of masonry projecting 40 ft. beyond the walls, and the passage from these gates was, instead of a drawbridge, a large causeway crossing the ditch. The garrison had from their arrival employed themselves indefatigably to remove and repair as many of these inconveniences and defects as the smallness of their numbers could attend to. They had endeavoured to burn down several of the nearest houses, but without success, for these, having no woodwork in their construction excepting the beams which supported the ceiling, resisted the flames. Of these houses the enemy's infantry took possession, and began to fire upon the ramparts, and wounded several of the garrison before night, when they retired. At midnight Ensign Glass was sent with ten men and some barrels of gunpowder to blow up two of the houses which most annoyed the fort. This party were let down by ropes over the walls, and, entering the houses without being discovered, made the explosion, but with so little skill that it did not produce the intended effect, at their return the rope by which Ensign Glass was getting into the fort broke, and he was by the fall rendered incapable of further duty; so that, at the beginning of the siege, the garrison was deprived of the services of four of the eight officers who set out on the expedition, and the troops fit for duty were diminished to 120 Europeans and 200 sepoys. These were besieged by 150 Europeans, 2000 sepoys, 3000 cavalry, and 500 peons."

Lord Macaulay wrote of what followed: "During fifty days the siege went on. During fifty days the young captain maintained the

defence with a firmness, vigilance, and ability which would have done honour to the oldest marshal in Europe. The breach, however, increased day by day. The garrison began to feel the pressure of hunger. Under such circumstances any troops, so scantily provided with officers, might have been expected to show signs of insubordination, and the danger was peculiarly great in a force composed of men differing widely from each other in extraction, colour, language, manners, and religion. But the devotion of the little band to its chief surpassed anything that is related of the Tenth Legion of Cæsar or the Old Guard of Napoleon. The sepoys came to Clive, not to complain of their scanty fare, but to propose that all the grain should be given to the Europeans, who required more nourishment than the natives of Asia. The thin gruel, they said, which was strained away from the rice, would suffice for themselves. History contains no more touching instance of military fidelity, or of the influence of a commanding mind."[1]

It was now that the gallantry of Clive's defence so impressed the Mahratta leader, Murari Rao, who was at the head of 6000 men, that he declared that he had till then never believed that Englishmen could fight, but, seeing their spirit, was determined to help them, and he put his troops in motion. This alarmed Raja Sahib, and he determined to storm Arcot before succour could arrive. He chose the great day of the Muharram, and Clive, who was exhausted with fatigue, was roused by the shouts of the enemy rushing to the attack, and was instantly at his post. The struggle lasted about an hour, 400 of the assailants were killed, while the garrison lost 4 Europeans killed and 2 sepoys wounded. At 2 A.M. next morning the enemy abandoned their camp, into which the garrison marched and brought off four guns, four mortars, and a large quantity of ammunition. Thus ended on the 15th November this famous siege, and Clive, being reinforced by Captain Kilpatrick, marched out on the 19th and took the Fort of Timeri. A few days later, he defeated a force of 300 French, 2000 horse, and 2500 sepoys, with four guns, and took Arni, with Raja Sahib's treasure and baggage.

In 1758 Lally seized the Fort of Arcot by bribing the Indian commandant, but in 1760 it was recaptured from the French by Colonel Coote. In 1780 Hyder 'Ali, after his victory at Pollilore over Colonel Baillie, made himself master of Arcot, and strengthened the fortifications, but Tipu Sultan abandoned it in 1783.

Muhammad Ali, who had received the title of Walajah from Shah Alam in 1765, removed in 1767 from Arcot to Chepak in Madras, and died there in 1795. In 1801, on the death of his son, Umdat-ul-Umara, the Carnatic was annexed by the E. India Company, and the districts of N. and S. Arcot, Nellore, Trichinopoly and Tinnevelly, were thus acquired.

The line from Arcot to Madras was the first railway in the Presidency, and was opened in 1856.

166 m. from **Bangalore**, **Sholinghur**. Near here, on a rocky ridge, Sir Eyre Coote defeated Hyder 'Ali and young Lally on the 27th September 1781.

[1] It has been said that there is no foundation for this incident, as the garrison had ample supplies to the end of May. But the story is told as early as 1816 by Sir John Malcolm in his *Short Account of the Rise and Progress of the Native Army*, and repeated in his *Life of Clive*. Malcolm says distinctly that he received "this remarkable anecdote from an authority I cannot doubt, as it refers to the most unexceptionable contemporary witness." Clive himself and his son Edward, the first Earl of Powis, who was Governor of Fort St George from 1798 to 1803, are obviously intended.

179 m. from Bangalore is **Arkonam** junction (R.), 43 m. from Madras (p. 532). A M.G. branch of the S. Indian Ry. runs S. to Conjeeveram and Chingleput, whence Madras can be reached by the S.I.R. main line (Route 34).

222 m. from Bangalore, **Madras** Central Station (Route 33).

ROUTE 33.—MADRAS CITY AND ENVIRONS

[*Map faces p* 616]

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MADRAS. ✱ — Capital of the Presidency of Fort Saint George. Lat. 13° 4′, long. 80° 14′ 54″ E. Population (1941), 777,481. Distances by rail; 794 m from Bombay (Route 26); 1032 m from Calcutta (Route 25); 1318 m from Delhi by the Grand Trunk Express *vid* Bezwada, Kazipet (p. 559), Nagpur and Itarsi (Route 9); 737 m to Colombo (Route 36); 357 m to Ootacamund (Route 35).

History

Madras[1] was the site of the earliest important settlement of the first East India Company, and was founded from the station of Armagaum (which lay N of Pulicat, itself 25 m N of Madras), in 1639 by Francis Day, on territory given by the deputy of the Raja of Chandragiri, the last representative of the Vijayanagar Royal family, and confirmed by the Raja six years later by a grant inscribed on a plate of gold The Nawab of Arcot confirmed the tenure (in jaghir) in 1762

A small Fort was erected in the settlement in 1644, which was known as Chennapatnam, and a town named the Black Town, now George Town, arose N. of it In 1683 the settlement was made independent of that of Bantam (founded in 1602), and Mr Aaron Baker was appointed its first President The Municipal Corporation is the oldest in India It was constituted on 29th September 1688 under a charter issued under the orders of His Majesty James II. under the East India Company's seal on 30th December 1687 The charter constituted the "Town of Fort St George, and all the Territories thereunto belonging, not exceeding the distance of 10 m from Fort St George to be a Corporation by the name and title of the Mayor, Aldermen, and Burgesses of the Town of Fort St George and City of Madrassapatam" A new charter was given in 1726 The last alteration was made by the Madras City Municipal Act, 1919.

The principal Governors of Fort St George were Sir W Langhorne (1670-78), Elihu Yale (1687-91), Thomas Pitt (1730-1735), the grandfather of Lord Chatham, and Pigot, subsequently Lord Pigot (1755-63 and 1775), who was deposed by his Council and died (1777, in durance), (the second) Lord Clive (1798-1803), Lord W. Bentinck, and Sir Thomas Munro (1820-27). Warren Hastings was second member of Council from 1769 to 1772

The Chamber of Commerce was constituted in 1836 The Buckingham and Carnatic Mills are built on the Otteri Nullah in Perambur to the N W of the city There are electric tramways, and one railway is electrified as far as Tambaram Water supply comes from the Red Hills (1872).

Arrival at Madras —The mail trains from Calcutta (Route 25), Delhi (p. 559), Bombay (Route 26), and Bangalore (Route 32 (*b*) terminate at the **Central Station** of the Madras and S. Mahratta Ry. which serves S.I Ry. B. G. trains to Mettupalaiyam (for Ootacamund) and Mangalore (Route 35). The **Egmore Station** (South Indian Ry) is the starting-point of the trains to Colombo *vid* Dhanushkodi, and the South of India generally (Route 36) Those visitors who prefer the sea route

[1] Selected List of Books on Madras — *Memories of Madras*, by Sir C. Lawson (Sonnenschein, 1905), *Vicissitudes of Fort St George*, by D. Leighton (Combridge, Madras, 1902); *Vestiges of Old Madras*, by Lt.-Col H. D. Love (Murray, 1913), *Fort George, Madras*, by Mrs Penny (Sonnenschein, 1900), *Madras in the Olden Time*, by J T. Wheeler (Higginbotham, Madras, 1862) There is a good chapter on modern Madras in *A Book of South India*, by J. C Molony (Methuen, 1926).

from Calcutta or Colombo, will be rewarded by a magnificent view of the city, especially from the S., the first object being the spire of the Roman Catholic Cathedral at San Thomé. The seaside Marina, some 4 m. in length, runs from San Thomé to the Napier Bridge over the river Cooum. Next comes Fort St. George, and N. of this is the High Court and the Harbour.

The centre of Madras is **Mount Road**, on or near which the principal hotels and shops are situated. Half-way between Government House, situated on the Cooum River, at the N.E. end of the road, and St. George's Cathedral and the Horticultural Gardens lying at the S.W. end, is the Madras Club, and in front stood until 1937 a statue of Brigadier-General Neill, C.B., Aide-de-Camp to the Queen, who "fell gloriously at the relief of Lucknow, 25th September 1857, aged 47" (p. 446). On the Willingdon Bridge approach is a statue of King Edward VII., by Mr. G. E. Wade, presented to the city by Lod Krishnadas Balmukandas, and unveiled in 1903. Close by is a statue of Lord Ripon (Viceroy 1880-84).

Between Government House and the fort is the *Island* embraced by two branches of the Cooum. The Gymkhana Club is in the S.W. corner. A statue of Lord Willingdon (Governor, 1919-1924) stands outside the entrance. On the road to the Fort is a bronze equestrian *Statue of Sir T. Munro*, by Chantrey, erected by public subscription in 1839. The S. branch of the river is spanned by the Willingdon Bridge, the N. branch by Walajah Bridge.

Government House contains a most interesting collection of pictures. In the lower hall is a picture of the installation of the last titular Nawab of Arcot, Ghulam Muhammad Ghaus Khan, under the Governorship of Lord Elphinstone, with the date 1842. In the drawing-room is a full-length portrait of Lady Munro (the beautiful Jane Campbell), by Sir Thomas Lawrence, also a remarkable portrait group, attributed to Chinnery, of Major Stringer Lawrence and Walajah, the famous Nawab of the Carnatic, and portraits of the Marchioness of Tweeddale, by Sir Francis Grant, Lord Clive, by Thomas Day, after Dance, Sir Arthur Wellesley, by Hoppner, General Medows, by Home, and Lord Hobart (who died at Madras, when Governor, in 1875, by Watts.

The *Banqueting Hall* (1802), detached, is 80 ft. long and 60 ft. broad. The principal entrance is on the N., and is approached by a broad flight of stone steps. Round the walls are pictures of the Queen-Empress Victoria, George III., at the beginning of his reign, a full-length of Sir Thomas Munro, by Shee, Robert, Lord Hobart, 1794-8, the third Lord Harris (1854-59), by Grant, Lord Mornington, afterwards Marquis Wellesley (by Thomas Hickey), seated on the terrace of the old Government House in the Fort, with two flags on his left, the British surmounting that of Tipu, and the steeple of St. Mary's Church, Sir C. Trevelyan, General Sir Eyre Coote, by Hickey, after Zoffany and Home, Lord Cornwallis, by Home, Lord W. Bentinck (Governor 1803-7), by H. W. Pickersgill, Lord Napier and Ettrick, K.T., in the robes of a peer; the Marquis of Tweeddale, by Grant, Sir M. E. Grant Duff; Lord Connemara, and others, including a curious portrait by

George Willison of Lord Pigot, which was originally in the Palace at Tanjore (p. 654). The present Governor, H.E Lieut.-Gen Sir Archibald Nye, G.C.I.E., K.C B , K.B E., M C., succeeded in 1946

To the E. of Government House, on the sea-front, are the **Chepauk Park and Buildings**, once the property of the Nawabs of the Carnatic. On the death of the last in 1855, the property was bought by the Government The entrance, by the Walajah Road, is through an ornamental gateway with representations in porcelain of the various incarnations of Vishnu, executed by the Madras School of Art The palace was divided into the Kalsa Mahal, a two storeyed building with a small dome, which is part of the *Engineering College* (1859) and the Humayun Mahal and Diwan Khana, both one-storeyed buildings, occupied by the *Board of Revenue*, and which contained the Darbar Hall The Mahakama, or Court of Justice, is the residence of the Principal of the Engineering College Beyond these are the Public Works' Secretariat and the *Presidency College*, originally organised in 1855, with the Students' Hostel behind it

E , on the sea-shore, is the interesting **Marine Aquarium** originated by Lord Ampthill and arranged by Mr Edgar Thurston in 1908 On the W is the Caste and Gosha Hospital (opened in 1886), hidden amongst trees, and beyond the Madras Cricket Club ground N of the old Palace is the *Senate House* of the University (1857), begun in 1874 and completed in 1879. There are statues of the late Mr V. Krishnaswami Iyer, a former member of the Madras Executive Council, and the late Mr G. K Gokhale, the well-known Mahratta politician Close to the S. entrance, facing Chepauk Palace, is the *Jubilee Statue of Queen Victoria*, a replica of the Boehm statue at Windsor, presented to the city by Raja Gajapati Rao of Vizagapatam, and unveiled on 20th June 1887. To the S is Queen Mary's College for Women

S W of the Chepauk Palace and S of Government House is *Triplicane*, containing the Palace of the Prince of Arcot, the representative of the family of the Nawabs of the Carnatic

The **Marina**, which Madras owes to the Right Hon Sir M. E Grant Duff, extends from the Napier Bridge on the N almost to the Roman Catholic Cathedral of San Thomé From the S end of the Marina, Cathedral Road runs nearly due W about 2 m. to St George's Cathedral, the Marina Road then turning inland to "the Adyar," from the river of that name The Buckingham Canal, 262 m long along the coast, is crossed by the road The Adyar Club has a white cupola , a broad terrace on the S. overlooks the Adyar River, on which excellent sailing and boating is to be had. In the 60-acre grounds there is room for a riding-track and a golf-course The name of the original owner of the estate, Robert Moubray, who came to Madras in 1771, survives in the inland road to the main entrance

San Thomé was first Portuguese, then fell to Golconda (1669). The French captured it (1672), but were expelled by the Dutch (1674). It then had seven churches The British occupied it in 1749.

The Roman Catholic Cathedral (1504) is reputed to cover the remains of St Thomas (but see p 615) His tomb is pointed out in a subterraneous recess covered

by an altar. On the E. side of the Cathedral is an Anglican church situated on a sand-dune. This tract and that stretching to the W. of it is also known as Mylapore (p. 615).

Good sea bathing can be had at Elliot's Beach (drive from end of Marina through San Thomé and over the Elphinstone Bridge across the Adyar) The Theosophical headquarters are here

After crossing the Cooum River by the Napier Bridge, the Marina becomes Beach Road, which runs past **Fort St George**, situated on the sea-front N of the island, containing the Arsenal and St Mary's Church The E. face of the Fort, which is straight, is now separated from the sea by the road and a sandy foreshore In the centre is the old **Sea-Gate.** The W. face landward is in the form of a crescent, surrounded by a deep fosse, crossed by drawbridges. There are two gates on this side, the Walajah and St George's Gates On the N are the Choultry Gate, now bricked up, and the North Gate The San Thomé Gate is in the S wall

The original Fort was founded in 1644. Designs for remodelling were prepared by Bartholomew Robins, once mathematical professor at Woolwich, in 1750. It had been unsuccessfully attacked by Daud Khan, General of Aurangzeb, in 1702, and by the Mahrattas in 1741; but in 1746 La Bourdonnais held the town to ransom for £400,000, and received in the name of the French King the surrendered keys, which were restored (21st August 1749) by the Treaty of Aix-la-Chapelle.

On 14th December 1758 the French again arrived before the Fort, under the command of Count Lally. The defence was conducted by Governor Pigot and Colonel Stringer Lawrence. The French made their approach on the N side, and their principal battery, called Lally's, must have been near where the Christian College House now stands, as it was close to the beach, and about 580 yds. N. of the Fort Another battery was at the Indian cemetery in George Town, and a third about 400 yds to the S.W. On 16th February 1759 the French retreated upon the arrival of a British fleet of six men-of war, leaving behind them fifty-two cannon and many of their wounded The enemy had pushed their trenches right up to the N.E corner of the Fort, and 500 of the 1700 British soldiers had been killed, captured, or wounded

In April 1769 Hyder 'Ali, after two years of war, appeared, and dictated terms of a treaty Again, on 10th August 1780, and once more in January 1792, the garrison were alarmed by the appearance of the Mysore cavalry Here Clive twice snapped a pistol at his own head From the Fort he marched to Arcot

If the Fort is entered from the E by the Sea Gate, the Secretariat buildings will be seen in the centre, with St Mary's Church to the S. and Cornwallis Square to the W. of them. A Legislative Council Chamber, in which there is a bust of the late Mr E S. Montagu, has been erected behind the Secretariat. In the square there formerly stood, under a stone canopy,

a *statue of Lord Cornwallis*, by Banks, erected in 1800 at the joint expense of the principal inhabitants of Madras. It has been removed to the reading-room of the Connemara Library (p. 613). The Church and the buildings to the S. of it are the oldest.

St Mary's Church,[1] built 1678-1680, was the first English church in India; but was entirely rebuilt in 1759. Here in 1689 were baptized the three daughters of Job Charnock, the founder of Calcutta. Robert Clive was married here in 1753, and Lord Pigot, Sir Thomas Munro, Lord Hobart (1875), and other distinguished persons are buried here. One piece of the Church plate was given in 1687 by Governor Elihu Yale, afterwards the benefactor of Yale College, U.S.A. The most remarkable monument is one erected by the E.I. Company to the famous missionary Schwartz, at one time the intermediary between the British and Hyder 'Ali. He is represented dying on his bed surrounded by a group of friends, with an angel appearing above. In the Church are hung the old colours of the Madras Fusiliers, the first European regiment of the E.I. Company. Lord Clive, Sir John Malcolm, and Sir Barry Close served in it. On the N. side of the Church are a number of tombstones removed from the old cemetery near the site of the High Court.

On the W. side of Charles Street, leading to the gate of San Thomé (the S. gate of the Fort), are pointed out quarters which, according to tradition, were once occupied by Colonel Wellesley (the Duke of Wellington). The office of the Accountant-General, which is close to the Church, was formerly the Government House.

The **Arsenal** forms a long parallelogram. In the *Museum* on the first floor are four cornets, or flags, belonging to the 1st and 2nd Regiments of Madras Cavalry; old flags taken from the Dutch and French, sewn up in covers, to protect them from the squirrels; a very curious brass mortar from Kurnool, shaped like a tiger sitting with legs planted almost straight out, the colours taken at the capture of Sadras and Pulicat in 1781, the Dutch colours taken at Amboyna in 1810; tiger-headed guns taken at Seringapatam in 1792, the six keys of Pondicherry, taken in 1778; and a projectile, which, issuing from the cannon, opens out like a double-bladed sword.

N. of the Fort, and at the S.E. corner of the city, is the old **Lighthouse** (1844) on the Esplanade, superseded by a tower on the **High Court**. The Lighthouse tower is 160 ft. high, and the light is visible 20 m. off at sea. The High Court was constituted in 1861 and the building, designed and erected in the Hindu-Saracenic style by Messrs J. Brassington and H. Irwin, C.I.E., was opened in 1892. In the central vestibule is a statue of Sir Muthuswami Iyer, a former Indian Judge.

A tomb in the shape of a pyramid stands in the compound outside, the solitary survivor of the many which stood here in the old cemetery of the Settlement. Lally made use of the monuments as cover in 1758, and they were removed after the siege. There are two inscriptions on the tomb:

[1] *Fort St George, Madras*, by Mrs F. Penny, and the *Vicissitudes of Fort St George*, by Mr D. Leighton, will be found to contain many interesting details regarding this church.

one to the only son of Elihu Yale (28th January 1682) and the other to Joseph Hynmers, second in Council (28th May 1680), whose widow married Yale

Opposite the High Court is the Y.M.C.A., of red sandstone, designed by Mr Harris, Government Architect, and presented by the Hon. W Wanamaker, formerly Postmaster-General of the United States W of the High Court is the **Law College**, in similar style, designed by Mr Irwin, C I E , and N. of this, across the Esplanade, are the **Pachiappa College** and Hall, erected in 1843 and named after Pachiappa Mudelliar, a wealthy and benevolent Hindu resident of the city, who, dying in 1794 when education was almost unknown in Madras, endowed various religious and scholastic institutions and private charities. Opposite the College is a statue of King George V

W of these are the **Madras Christian College Buildings**, situated opposite the High Court and to the E of the Y.M C A buildings They were erected at a cost of £50,000 The College was originally founded by John Anderson, in Armenian Street (below), in 1837 Opposite it is a statue of the Rev Dr Miller, C I E , a former Principal, who introduced hostels in 1882 The College has moved (1937) to Tambaram, where a World Christian Conference was held in 1938

First Line Beach, the most important commercial thoroughfare, begins N of the Esplanade from Parry's Corner It represents the old line of the sea-wall, but the Harbour has caused the accretion of sand Here are the **Beach Station** of the S.I. Ry , the **Port** and **Customs Offices**, and various houses of business W of it is Second Line Beach and the thickly-inhabited Indian quarter, formerly known as **Black Town** and renamed **George Town**, in honour of the visit of King George V. in 1905.

Armenian Street, parallel to the sea-front, contains the Mosque of Nawab Muhammad Ali, an Armenian church, and a Roman Catholic cathedral, dating from the beginning of the 18th century , farther to the W of Armenian Street lies Popham's Broadway N of the city are the Monegar Choultry, a Poorhouse for destitute Indians, and the Leper Asylum , and at the N W corner in Wall Tax Street are some remains of the old town walls

The name of this street commemorates a tax imposed in order to defray the cost of a rampart, an assessment being made on "every house and garden within the walls," and a Collector of the Town Wall Tax was duly appointed. But legal opinion was received from Bengal that the E. India Company had no power to tax the inhabitants [1]

Other streets running N and S are Godown Street and Mint Street, at the N end of which was the Mint in the present Government Press building From E to W runs Old Jail Street, and at its junction with Mint Street are seven wells from which the Fort drew its water-supply Works for underground drainage for the Northern part of the city have been executed, and drainage works throughout the remainder

The **Harbour** The foundation-stone of the harbour works was laid by King Edward, then Prince of Wales, in 1875, but in October 1881 the works completed up to that time were much damaged by a cyclone These violent

[1] Molony, *A Book of South India*, p. 21.

storms have visited Madras from time to time. Such occurred in October 1746, in 1782, 1807, and 1811. On 2nd May 1872, in another great storm, the *Hotspur* and eight European vessels and twenty Indian vessels of altogether 4133 tons were lost. In December 1901, 11 inches of rain fell in about 8 hours. On the 4th December 1930, 7 inches of rain fell in 24 hours The cyclone of November 1927 passed over the city and spent its fury on Nellore (p 511)

The sand beach shelves out to a depth of 10 fathoms at a distance of a couple of miles from the shore The harbour, therefore, has had to be an entirely artificial one "a challenge flaunted in the face of nature" It is formed of breakwaters extending out from the shore 3000 ft apart, closed at their seaward end by another work which extends, however, to a distance of 1500 ft. North of the Northern of the two breakwaters, thus forming a shelter for the entrance, 400 ft wide and 35 ft deep at low water, which has been formed near the Eastern or seaward end of the N breakwater. The Western or shoreward side of the enclosed 200 acres has been furnished with a deep-water quay, and the whole of the enclosed area has been dredged to a depth of 30 ft The entrance used to be in the Eastern side of the harbour, but there were many weeks in every year when the water inside the enclosure was too rough for the convenient working of cargo. There is a 9-acre inner or subsidiary harbour for the shelter of craft of 1000 tons and downwards, and for a fleet of 60 or 80 steel and wooden lighters of 40 tons to 100 tons each, as well as a number of steam tugs. This inner basin is quayed and craned all round for lighter work, as is also a further 2-acre pond for the timber trade of the port. Besides the quay along the West side of the harbour, which accommodates four to six of the ordinary Suez Canal class of vessels, there are three other quays at which vessels can lie The P & O., City, B.I, and other liners call at the port regularly, embarking and landing passengers direct at the quays, where trains come direct to ship's side. Shore accommodation has been provided, facing the South Quay, and customs examination and the medical inspection of emigrants take place here. "Waler" horses walk straight off shipboard into paddocks. Bulk oil, petrol, and kerosene are pumped ashore at three places, direct from the oil-steamers, into million-gallon tanks, while steamers can bunker fuel oil on the West Quay The quays are well equipped with cranes For the transit of goods through the port, between ship and rail or cart, a range of about 6 acres of fine shedding is available, besides about 5 acres of warehouse floor space for exports The general business is conducted in a range of offices standing in the centre of the West quay The trains of both railway administrations, one 5 ft 6 in gauge and the other of the metre-gauge, enter the harbour premises, where they are handled by the Port Trust

The principal exports are hides and skins, chrome, ore and magnesite, ground nuts and other oil seeds, raw cotton, manures and onions The principal imports are coal, oils, food grains, sugar, timber, machinery, and piece goods The rise and fall of the tide is only about 4 ft. An old iron screw pile pier, so long a feature

of the port, has long since been removed.

W. of the Fort is a group of buildings, consisting of the Memorial Hall, the Medical College, the General Hospital, the offices of the Madras and S M. Ry., and the Central Railway Station. A little farther W., across the Cochrane Canal, are the Penitentiary, the Moore Market, the Victoria Public Hall and the Municipal Offices at the entrance to the People's Park.

The **Memorial Hall** was erected by public subscription in commemoration of "the goodness and forbearance of Almighty God in sparing this Presidency from the Sepoy Mutiny which devastated the sister Presidency of Bengal in the year 1857." It is available for non-political public meetings. The Bible Society occupies the basement, and the Tract and Book Society an adjacent building.

The **General Hospital** is opposite the Central Railway Station. The records go back to 1829. Dr Mortimer published an account of it in 1838. The hospital is for both Europeans and Indians, with an out-patients' department. The Medical College is accommodated in a detached building to the E. side. The **Central Railway Station** of the Madras and Southern Mahratta and S I. Rys. has a clock tower 136 ft. high.

Adjoining the Jail is the Choultry (R.H.) of Sir Ramaswami Mudeliar. The Moore Market is at the entrance to the People's Park, to the E. is the Evening Bazar building. Alongside of the Market is the **Victoria Public Hall**, designed by Mr Chisholm, it was erected during 1883-88. The principal hall takes in Madras the place of a theatre as well as of an "assembly room."

W. of the Victoria Public Hall, in the *People's Park*, the "Ripon Building," after the Viceroy, Lord Ripon, the founder of local self-government in India, is occupied by the Corporation of Madras. Designed by Mr Harris, Consulting Architect to the Government, it has a clock tower higher than that of the Central Railway Station. In the centre of the Eastern portion of the park, the S. Indian Athletic Association occupy a large piece of land where athletic sports and annual fairs are held. Moore Pavilion is at the Northern end. To the N. of this is a Swimming Bath. The **People's Park** originated with Sir Charles Trevelyan while Governor of Madras, and was opened in 1859. It embraces 116 acres of land. It has eleven artificial lakes, an athletic ground, a fine zoological collection, tennis-courts, and a bandstand.

The Poonamallee Road skirts the S. of the quarter of Vepery and leading to the quarter of Egmore, passes the School of Arts and St Andrew's Church. Vepery is largely occupied by Anglo-Indians, whose Association, founded in 1879, is the leading society of its class in India. The Church of *St Matthias* was given by Admiral Boscawen in place of one destroyed during the 1746 war with the French. W. of the church is the Doveton Protestant College, founded in 1855.

The **School of Arts** was established as a private institution by Dr Alexander Hunter in 1850. Besides drawing, painting, engraving, and modelling, the crafts of cabinet-making and carpet-weaving, pottery and lacquer, metal and jewellers' work, are taught.

St Andrew's Church was built in 1818-20 at a cost of £20,000, the Architect being Major de Havilland The Madras stucco, or *chunam*, in the interior gives to the pillars all the whiteness and polish of the finest marble The steeple rises to the height of 166 ft, and, after the lighthouse tower of the High Court, is the principal landmark in Madras, the building is remarkable for the complete substitution of masonry for timber, which might be destroyed by white ants

In the **Egmore** quarter are the M G **Station of the South Indian Railway**, the Maternity and Ophthalmic Hospitals, and the Museum.

Pantheon Road leads S W to the **Central Museum** (1854), nucleus of a group including the Victoria Technical Institute (1902), the Connemara Library, and the New Theatre. To these has been added the Empress **Victoria Memorial Hall**, a graceful building, of which King George, then Prince of Wales, laid the foundation-stone in 1906, and which was opened in 1909 The collection was formed in 1846, and owes its present development to Dr Balfour In the various Departments of Natural History, Botany, Geology, and Industrial Arts are many objects of great interest The Department of Antiquities and Archæology contains some very beautiful remains of the Buddhist tope at Amaravati (p 510), excavated by Mr R. Sewell, M.C S Indian bronze images of Krishna and the dancing Siva are superb Objects of interest formerly in the Arsenal are:—iron helmets captured at Manilla, a gun captured from Holkar in 1804; a victim-post surmounted by an elephant's head, at which human sacrifices were made (ground-floor), the cage in which Captain Philip Anstruther was confined in China;[1] and some leathern petards. The Library has a reading-room, in which works relating to Madras and S India can be consulted; the books of the Madras Branch of the Royal Asiatic Society are kept here Archæological remains are arranged in the grounds in front of the Museum. The statue of Lord Cornwallis, which once stood in the Fort Square (p 609), has been placed in the reading-room. On the pedestal is sculptured the surrender of Tipu Sultan's sons in 1792.

From near the Museum the Commander-in-Chief's Road leads to the bridge so named, and to Mount Road. A road to the N. crossing the Cooum River by Anderson's Bridge leads to the old **Observatory** in Nungumbaukum, past the **Old College**, *corresponding to the* Writers Buildings in Calcutta (p 122) and Doveton House, once the residence of General Sir John Doveton of the Madras Cavalry, who died there in 1847, and now a Government Training College for Girls

The Observatory originated in a small private station started in 1787 by Mr W Petrie, a scientific member of Council The present building was erected in 1793 by Michael Topping, under orders from the Directors of the East India Company It stands in N. lat 13° 4′ 8″, long 5 hr. 20 m. 59·6 s E, and formerly gave the railway time for all India. It is now used as a meteorological station only, the Observatory having been moved in 1899 to Kodaikanal (p. 661).

1 Capt Anstruther of the Madras Artillery (1807-1884) was captured by a Chinese mob in September 1840, and carried about the country in this cage until the following January. He was over 6 ft. high A lady, Mrs Noble, was kept in a similar cage

From the Observatory a thoroughfare runs S. to the **Horticultural Gardens and St George's Cathedral**, towards the S.W. end of Mount Road. The gardens, which occupy an area of 22 acres, are laid out in a highly ornamental manner Many rare trees, shrubs, and plants are to be seen there, one of the great attractions being the splendid *Victoria Regia*, in a couple of small ponds. The Society possesses a valuable Library, containing many rare works The gardens were brought into existence mainly through the efforts of Dr Wright about the year 1836.

The **Cathedral** of St George stands on the E. side of the gardens. The exterior is not handsome, but the dazzling white *chunam*, the decorated roof, the tablets and tombs, and the lofty and massive pillars in the interior, produce a very pleasing impression At the E end of the N. aisle is a fine monument to the Right Rev Daniel Corrie, LL D., first Bishop of Madras in 1835 The monument to Reginald Heber, the second Bishop of Calcutta (d. 1826), is on the N wall of the N aisle, and represents him confirming two Indians There is also a monument to Major George Broadfoot, C B , who was one of the illustrious garrison of Jalalabad, and was killed at the Battle of Firozshahr (Ferozeshah) (see p 346). The Church was consecrated in 1816, and became the Cathedral Church when the Diocese of Madras was constituted in 1835.

From the Cathedral the road to Guindy and the Southern suburbs runs along the side of the Long Tank for nearly 3 m. to the **Marmalong Bridge** (said to be *Mamillanna*, "Our Lady of the Mangoes"), spanning the Adyar River. It has twenty-nine arches. Near the N. end is an inscription in Latin, which reads that it was erected in 1726 by Petrus Uscan, an Armenian, *pro bono publico*; hence its former name, the "Armenian Bridge" To the right and left of the road before crossing the river will be observed the *Teachers' College* and the *Government Veterinary Hospital*. At Saidapet (5 m from Egmore station on the S I R. line to the South) are the headquarters of the Chingleput District

The **Little Mount** is a curious spot on a rocky eminence on the left of the road after crossing Marmalong Bridge This place is famous in connection with the tradition of the martyrdom of the Apostle St Thomas It was formerly called Antenodur, but the Portuguese named it Little Mount to distinguish it from St Thomas's Mount, which they called Big Mount. The Apostle St Thomas (so runs the tradition) used to live here periodically and pray on the top of the hill (Little Mount) according to the Jewish custom When praying in the cave he was, it is said, mortally wounded by a lance In that state he ran to St Thomas's Mount, where he was killed His body was carried by his converts to San Thomé, where it was buried, and his tomb is in the Cathedral of San Thomé

A flight of steps leads to the Church On the left of the entrance is a portrait of St Thomas with an old Portuguese inscription The Church was built by one Antonio Gonsalves De Taide, 1612 (who appears to have been a Goanese), and was endowed with 32 acres by the Nawab of Arcot. It is dedicated to Our Lady of Health.

Some steps on the left from the Church lead down to a *cavern* hewn out of the rock. The entrance is low and narrow; there

is nothing to see but an altar with the image of St Thomas Daylight is admitted by a narrow aperture, through which, it is said, St Thomas escaped. In the vestry-room is a Missal with the date 1793. A dark cell full of bats is reputed to be the oldest part of the Church, where St Thomas himself worshipped

At the N. of the Church there is a **Masonry Cross** on the top of a rock, from which St Thomas is said to have preached.

To the W of the Church there is a cleft in the rock, which, it is said, was miraculously made by St Thomas to provide himself with water. The small Greek cross and foundation of a building are relics of St Thomas's prayer-house At the foot of this rock, at the S, there is St Thomas's **Fountain**, which has water throughout the year To the E of the Church there are some rocks believed to be marked with the prints of the feet, hands, and knees of St Thomas, where he lay prostrate on them when he was wounded The general tradition that St Thomas was martyred on 21st December 68 A.D. at Mylapore, which H H Wilson (*Roy As Soc Trans*, I, 161) identified with Mihilaropye, or Mihilapur, now St Thomé, is not accepted by modern criticism

At the top of the parochial house, about 90 ft high, there is a visitors' room furnished, a panorama of Madras, St Thomas's Mount, the Governor's House, Guindy, the King's Institute, Teachers' College, and the surrounding hills and country may be obtained from here Visitors are welcomed, and a guide is available.

Beyond the Little Mount is Guindy Park, the **Governor's Country House**, standing in a large park with many deer It is faced with the beautiful white *chunam* for which Madras is famous, the centre hall contains a bust of the Duke of Wellington. The flower-garden lies to the S, and is 8½ acres in extent

The **Race-Course**, close to Government House, is 1¼ m long On it is an obelisk to Major Donald Mackay, of the Madras Artillery, who was mortally wounded at the siege of Cuddalore (p 648), in 1783. There is a golf course

St Thomas's Mount, or the **Great Mount**, 8 m S.W. of Madras, lies S of Guindy railway station, on the S Indian Railway (7 m from Egmore) At the base are the *Cantonment* and a building which used to be the headquarters of the Madras Artillery The aerodrome is here The hill is about 250-300 ft. above sea-level, and has a flight of 132 steps, built by an Armenian.

Mention of St Thomas's Mount, which is known to Indians as *Faranghi Mahal* ("The Hill of the Franks") is made by Marco Polo as early as the 13th century A very ancient belief affirms that the Apostle was martyred on this hill whilst kneeling on a stone which is now on the central altar of the Church The stone has an inscription in Pahlavi (a dialect spoken in those days in the suburbs of Madras), which alludes to the martyrdom. A Brahman is said to have transfixed the Apostle with a lance, relics of which are kept in the Cathedral of San Thomé at Mylapore The Church was built by the Portuguese in

1547. Over an archway is the date 1726, and within are several slabs with epitaphs. The main gate and portico were built by one C. Zacharias in 1707 A.D. Behind the altar and above it, is a remarkable cross with a Nestorian inscription in Sassanian Pahlavi of about 800 A.D. The inscription begins to the right of the top of the arch Dr Burnell translates it. "Ever pure . . is (in favour with Him who bore the cross" Besides the stone, the Church contains a picture of the Virgin Mary, said to have been painted by St Luke, and brought by St Thomas to this place

In the 15th century the Nestorian Church in India fell into decline, until in most places it totally disappeared, but this hill continued to be the resort of Nestorian monks till the beginning of the 16th century, when the Portuguese built the Church dedicated to Our Lady of Expectation, now under the care of the R C chaplain at St Thomas's Mount

Next to the Church there is a Convent of Franciscan Missionary Nuns of Mary, who are in charge of an Indian girls' orphanage and industrial school

The **English Church**, a few hundred yards from the mess-house, is a handsome building with a well-proportioned steeple There are monuments here to several distinguished officers

Pallavaram (12 m from Egmore) is the next station to St Thomas's Mount on the S I. Railway. It was ceded by Muhammad Ali in 1750 and became a Cantonment (1777). The hill is about 500 ft. high, with a long, low range extending for 3 m S. 2 m. from the station is the site of old Pallavaram, where there are three rock-cut shrines ascribed to the 7th century A.D One of these is now in the possession of Muslims, who have placed in it the *panja*, or hand symbol

A pleasant excursion can be made by car from Madras to, 34 m., Chingleput, and, 19 m. farther on,

Mahabalipuram, or the **Seven Pagodas** (Route 34) (the journey by house-boat on the Buckingham Canal is not recommended). Here the Dravidian style of architecture originated. Other excursions can be made to Sadras and Covelong of historical interest

ROUTE 34.

MADRAS to **Chingleput**, thence by branch line to **CONJEEVERAM**, back to **Chingleput**, for **MAHABALIPURAM** (the **Seven Pagodas**), and back to Madras.

This excursion embraces both Conjeeveram, "The Benares of the South," and the wonderful remains at Mahabalipuram, known as the Seven Pagodas. The entire trip can be accomplished by motor-car, Conjeeveram is 24 m by road from Chingleput, the Seven Pagodas 19 m from Chingleput, Chingleput is 34 m from Madras For the journey by rail to Conjeeveram the train should be taken at the **Beach** or **Egmore Stations** (S I Ry metre-gauge line), and the remainder visited by car another day

Certain passenger trains run through *viâ* Chingleput (35 m).

22 m from Chingleput is **Conjeeveram** (*Kanchipuram*, the Golden City), one of the oldest towns of India, and one of its seven sacred places [1] Travellers' bungalow arrangements must be made for food Inscriptions show the town to have occupied a position of influence before the Christian era In the 5th century B C Gautama is said to have converted the people of Kanchipuram, and in the 3rd century B C Asoka is said to have built many Buddhist topes in the neighbourhood, though none now remain In the 7th century A.D. the Pallava Kings ruled in the Southern Deccan, building forts and Palaces in the basin of the Palar, and carrying on an extensive commerce both with West and East. They were renowned for their learning and skill in war; they bestowed liberal patronage on learning and architectural arts. Their capital, Kanchi or Conjeeveram, is famous in ancient Indian history. The larger Dravidian temples (of comparatively recent date) are at the present time the most conspicuous objects; but the special attractions are the Pallava temples, which are among the oldest known examples of Hindu architecture in S. India

[1] Of the other six (see p 86), three are sacred to Siva and three to Vishnu. Conjeeveram is sacred to both.

Great Conjeeveram is W of the railway station, **Little Conjeeveram** about 2 m S E. The route between the two towns is studded with a number of important temples — a few dedicated to Vishnu and a large number to Siva. In and around Conjeeveram there are said to be a thousand temples and ten thousand lingams.

The *Vaikunta Perumal* Temple, one of the eighteen important Vishnu temples of Conjeeveram where worship is still conducted, is S W. of the station. The *vimana* tower has tiers of three shrines one over the other, with figures of Vishnu in each shrine The sculptures on the different sides of the *vimana* represent scenes from the Puranas

There are two covered Prakaras of the shrine, and the courtyard has a covered veranda on the four sides. As usual, the shrine is entered from the E and through an *ardhamandapam*, with its eight *yali* piers and four pilasters and sculptured panels. On the E side of the courtyard the *mahamandapam* is entirely roofed over to the unfinished gopuram built by the later Vijayanagar Kings

There are figures on the right and left side of the entrance gopuram, exhibiting an abundance of detail and sculpture The design has been well thought out.

S W. from this temple, and at a little distance, stands the *Matangeswara* Temple. Its plan is simple—a small shrine with massive walls and entrance through a pillared porch; there is a similarity between this and the Kailasanath tower (below)

The tower over the shrine is hollow. It is square and built in three storeys The pillars at the porch are distinctly of the Pallava type Each has a lion base, the tail of the lion being curved up the back of the pillar Over the lion is an ornamental band with polygonal-sided necking, large projecting capital, and a square abacus over.

The back of the porch has pilasters responding to detached piers with figured panels on each side The pilasters at the corners have *yalis* and riders. The N and the E walls have Saivite figures and sculptured panels between the pilasters.

The most important of the group of *Pallava* structures is the *Kailasanath* Temple, some distance to the W. Its plan is somewhat peculiar. It is comprised in a large and a small courtyard, with a central group of shrines placed towards the W extremity of the large one.

In the small court on the interior side of the outer wall the sculptures are all figures of Siva in different postures The most noticeable sculpture is that on the large panel to the right It has a group of twelve sages, evidently listening to the exhortations of Siva, who is seated under a banyan-tree in a panel opposite this one on the S. side wall of the central shrine in this court On another large panel eleven seated sages are similarly listening to Siva, armed with different symbolical weapons, and seeming to preach war.

A wall stands between the large and the small courts, and a small temple stands in a line with the centre of this wall On either side of this temple there are doors from one court to the other. Ranged along the E face of the small court are eight small shrines, each with a tower over it. They closely resemble in design the *raths* of Mahabalipuram. The spaces between these are now filled with rubble work, blocking up the sculptured panels on the sides

Each of these is called a *rath*. That on the extreme left stands completely detached from the rest. It is in shape a square, and has carved figures of Siva and Parvati in a sitting posture on the back. On the exterior wall are the *yalis*, partly carved, each *yali* supporting a pilaster with moulded caps over On the back and sides are rough blocks and panels Between these panel spaces and the corner *yalis* are small pilasters

The small platform in front has *yali* piers, whose capitals only are complete, there are traces of carved floral ornaments on the cornices, and a series of small mouldings with carved projections at intervals, the octagonal-domed *sikhara* has carved pedimental ornaments on each side

The *rath* to the right of the last is more complete, as is evident from the fact that the *yalis* on the piers and the dwarpals on each side of the door panels on the exterior of the walls are all carved Siva is seated under a tree with long, matted hair and a *naga*, or serpent, on his left

The doorways into the W. court have *yalis* at the corners, pilasters on the angles of the doors, and a cornice over Above the cornice is an upright portion of wall rising above the court walls on either side In the centre of this is a panel with Siva and Parvati and attendants Brahma and Vishnu are shown worshipping them.

The other *raths* are of the same type. The *yalis* of each of the *raths* differ, some having tusks and twisted trunks. The inscriptions on the granite portion of the *raths*—some in Pallava *grantha* character—also deserve careful study. The panel on the Northern side of the last *rath* has a standing figure of Siva with matted hair, two hands, and a serpent over his shoulder Over the panelled niche in which the figures stand is a floral pedimental ornament only partly carved. The central portion shows representations of two *yalis* with a drooping floral ornament on each side—a thing very common on most of the niches in the temple

The sculpture on the back of the successive *raths* should be noticed Behind the back of the *rath* on the extreme N. is Siva on an elephant, with the death-noose in his left, the trident in his lower right hand, and a naga in the lower left, and his right foot uplifted on the elephant's head He is represented as stripping the elephant's skin, which he waves aloft in his two upper hands

There is a group of posed female figures on some of the small panels, and on the back of the sixth *rath* is a chariot drawn by two horses, with the figure of Siva in a boon-conferring attitude

The next shrine of this temple to be observed is the small one in the centre of the wall dividing the lesser and larger courts This is at present known as the *Narada Linga* Shrine • The lower bases have two courses of granite, over them a freestone course; gandharvas are sculptured on this third course. They have their hands raised over their heads with the palms of their hands flattened against the moulding above, as if supporting the building.

On the exterior of the porch on the right side is a row of *hansa*, or sacred swans. The panel opposite the last on the inner side of the porch has a large finely-carved figure of Siva, with matted hair and his right knee bent; he has a richly-carved crown, and ornaments on the neck, arm, and leg Over his left shoulder is a garland of (apparently) bones. Another has alternate square and round ornaments, on each of which is a sculptured skull.

The exterior of this shrine is again full of sculptures—all representations of Siva. The features of all these figures have a marked form of countenance The noses are pointed and flat, and give a curious expression to the face, and it is believed that they represent *kurumbars*, common among some of the tribes in early times in this country

On each side of the large court (W) is a continuous series of cells, each with a small tower and *sikhara* over it This has given rise to a belief that this must originally have been a Jain temple, but in the sculpture there is not a single figure which could be called Jain. These cells were occupied by *lingas*, each with a separate name and representing a different manifestation of Siva. The inscriptions on the face of each are mostly in an early palæographical form of *grantha* character A notable peculiarity is the scrolled foliation attached to letters of these inscriptions The latter give either the names of the different *lingas* or the titles of Kings who erected the building The *sikharas* (towers) originally showed above the wall of the court, with elephants and Nandis placed alternately on the wall-head between them But the modern owners have blocked up the spaces between, so that the outside of the court forms a con-

tinuous line of dead wall. The weight of this masonry has caused large cracks in parts of the walls. The cell towers show on the inside of the courtyard wall. On the N. and S sides of this court the cells directly opposite the central *vimanas* are larger than the others, and have higher towers over them.

To the E of the temple stands the *nandi mandapam* The basement only remains There are four *yali* piers at each corner. It must have had a roof, but now there are no traces of it

Then comes the *mahamandapam*, originally detached, but now joined to the shrine by the *ardhamandapam* The piers in the *ardhamandapam* are widely spaced, slender columns, and are of a later structure, evidently built in the time of the later Vijayanagar Kings

The *mahamandapam*, however, has massive stone piers, with heavy square capitals and inscriptions on them of a later date One says that King Vikramaditya made a grant to the temple The piers are without bases The capitals are of one design throughout—square with great projection Several have circular lotus discs carved on the faces of the lower and upper square portions These were evidently intended to support some great overhead weight. The perforated window which leads into the *mahamandapam* is much older than the building in which it now is, and is of black stone. The perforated work is a series of twisting boughs with openings between partly filled by cross-buds. Over the opening is a triple cornice with horseshoe-shaped panel, in it is a figure of Siva with eight arms On the circumference of the panel is a leaf ornament springing from *yalis* at the foot.

The sculptures at different elevations of the *mandapam* are mostly figures of Parvati. In the lower right panel of the S. elevation is the figure of Lakshmi seated on a lotus flower, holding lotus buds, conch, and Chakra. In the pier of the minor panels on each side are *chauris*, elephants, gandharvas, and attendants. Some of the walls are quite plain, without ornaments of any kind.

The central shrine is surmounted by a lofty pyramidal tower. The entrances to the central *vimana* are from the E and N At each corner, and on the N., S, and W sides, is a shrine. All shrines and the porch have seven smaller towers, which rise up to and are grouped alongside the greater one Near the base, at each corner and face, between the projecting shrines, a large Nandi (sacred bull) lies on the ground

At each corner formed by the projecting shrines, and extending around the *vimana*, are series of triple *yalis* and riders, intended to represent a support and guard to the temple The figures sculptured on the exterior ground storey of the *vimana* are again representations of Siva, Brahma and Vishnu worshipping him, and of Parvati The *sikharas* over the corner shrines are square, and over those on the façades are semi-barrel shaped

On the main tower is a storey with a series of two weather-worn sculptured panels on each face of the central projection, and one at each corner Over this is a double cornice with small *sikharas*; the storeys above are successively stepped back, forming a slight platform between each. The tower is capped by an octagonal *sikhara* with small pediment on each front

The whole tower is plastered over, and the plaster faithfully represents the underlying stone-work, but is much coarser in execution.

In the large courtyard there are twenty-two pilasters placed at regular intervals on its N exterior side Each pilaster has a *yali*, with rider seated on reverse sides, at each alternate bay.

On the W. exterior side is the entrance, a gateway with a small tower. An elephant and gandharva are seated on the wall-head, and an upper central panel has Siva seated with his hand across his knees On this façade of the court wall there are five *yali* pilasters on either side of the central doorway The S. exterior side is spaced by similar pilasters *Sikharas*, elephants, and Nandis are exposed to view here

The chief street of Great Conjeeveram leads to Ekambareswara (Siva) Temple, which has a sixteen-pillar *mandapam* in front of it It is quite a modern structure To the N of this *mandapam* is the main tower of the temple—a massive structure 188 ft high, divided into ten storeys. It was built by Krishna Devaraja of Vijayanagar in 1509. From the topmost storey a grand view is obtainable of the whole town and its surroundings No two towers of the temple are opposite each other, no two walls of the temple are parallel, and there is hardly a right angle in the place. Through the gateway a large open space is entered, to the left of which is the "Hall of a Thousand Pillars" (really 540), most of the columns are beautifully carved and support richly-decorated friezes. In the centre of the hall are a number of grotesque wooden figures, which are taken out on occasions of processions. Into the interior of the temple none but caste Hindus are allowed to enter.

This temple served as a fort during the Carnatic wars, and was attacked by Hyder 'Ali. From this building Sir Hector Munro retreated to Chingleput on learning that Col. William Baillie's force had been cut to pieces by Hyder 'Ali at Pollilore (see below), a few miles away [1] It had been ordered down from Guntur, but was unable to effect a connection To the S of this temple is the Sarvatirtham Tank, into which Munro threw his guns and baggage Its four sides are studded with little pagodas

About five furlongs from this tank is the temple dedicated to *Kamakshi*, the "Loving-eyed" Parvati The consort of Siva is worshipped in Kasi (Benares) by the name of the "Broad-eyed," in Madura as the "Fish-eyed," and at Conjeeveram by the name of *Kamakshi* This ancient temple is believed to contain the *samadhi* (burial-place) of Sri Sankara

About 2 m from the borders of the town is a famous Jain temple of the Chola era (907-1310) in the village on the bank of a river

At Pullalur (Pollilore) 10 m. N of Conjeeveram, which was the scene of Baillie's disaster in 1780, are two lofty obelisks commemorating the death of two officers in the engagement Another battle was fought on the same ground by Sir Eyre Coote, on 27th August 1781, Hyder 'Ali claimed this as a drawn battle, but left the field, covered with skeletons

Of the latter Dravidian temples, the most important is that of *Vara-*

[1] The best account of the disaster is given in the *Lives of the Lindsays* (vol. iii. p. 258), by the Hon. John Lindsay, who was himself taken prisoner.

daraja Swami, a form of Vishnu, at Little Conjeeveram. The tower and the outer high walls enclosing the temple appear quite modern: One of the most ancient at Conjeeveram, it has been renovated within the last four hundred years The tower is about 100 ft high, and has seven storeys. It contains no figures or representations of Hindu deities The original builders apparently intended to build it higher than it is. The tower at the E extremity of the temple, just opposite the one at the main entrance, is the higher, and evidently more ancient Until a few centuries ago the E tower was the front one, and the idol in the temple faced E. There are two tanks adjoining the towers These are fine structures nearly squared, with sides sloping to the bottom in gradual rows of cut granite steps The tank at the E. tower is much the older

Within the first courtyard are singularly beautiful pavilions, with painted roofs resting on four tall, slender pillars These are situated in front of the flag-staff and a monolith column of granite intended as a lamp-holder. The remarkable *Hall of Pillars*, to the N of the *mandapams*, is one of the beauties of S. India

The *mandapam* has often felt the shock of wars, and hence the figures are slightly mutilated, apparently by shot and sword The sacrilege is ascribed to Muslim invaders, and to Hyder 'Ali in particular. The hall has ninety-six pillars, carved at the base into horsemen and hippogriffs The carvings on the pillars are mainly illustrations of the Avatars of Vishnu and incidents mentioned in the *Ramayana* and *Mahabharata*. There are a few lay-figures of great interest. In the fourth pillar from the W., at the N. extremity, facing the tank, there is a figure of a Rajput warrior with a gun in his hand At the top of this pillar there is a grotesque figure of the god of death Each of the corner stones on the roof of the hall is a monolith of great size Not only are parrots, snakes, etc , sculptured on the top, but chains of stone originally hung down nine feet The story is told that Hyder 'Ali wanted to try the strength of his sword and cut them to pieces. The chains are now connected together by iron rings

Into the second court non-Hindus are not permitted to enter The colossal cars, or *vahanams*, on which the idol is carried in procession on the occasion of the Brahma Uthsavam festival in May of every year are of great beauty This temple is also famous for its umbrellas A pair of the largest and the best of these cost Rs 750 The jewels of this temple are not so valuable as those in Tirupati or Sri Rangam, but the workmanship is of a very superior order They will be shown by the trustee, if desired Among them is a necklace, worth Rs 8600, which is said to have been given by Clive At this temple there is a periodical recitation of the Vedas by the Aiyangar Brahmans of this place As many as 1000 congregate for its recitation

About 1 m from the Vishnu Conjeeveram is the magnificently-carved wooden car, very high, with massive wooden wheels. In Hodgsonpet the cloth bazars have the silk-borderered cloths for which Conjeeveram has always been famous

Chingleput junction (R.) is 35 m. from Madras by the main line of the S. Indian Railway (Route 36)

Chengalpat (Singhala petta) means "the town of the lotus."

The **Fort** stands on the margin of an irrigation reservoir or tank. It is of Vijayanagar origin A slab embedded upside down in one of the ramparts evidently relates some deed of Narasimha (1486), the founder of the second Vijayanagar dynasty. Tradition states that the Fort was built by Timmu Raja, an offshoot of the dynasty, after their flight South in 1565 It is certainly a typical Hindu structure, built after the model of Gingi, "the modern Troy" The walls are formed of roughly-dressed stone, hewn for the purpose by families of workmen, who affixed their marks to the stones It is nearly a parallelogram, 400 yds by 320 yds

About 1646 the Chingleput District was taken possession of by Mir Jumla, the General of the King of Golconda, and, on the fall of Golconda in 1687, it passed with the rest of the Carnatic into the hands of the Mughal Emperor. The French acquired possession of the fort in 1751, and it was taken by Clive in 1752. During the struggle for supremacy in the Carnatic it was used by the English as a base for keeping stores, as a place of confinement for French prisoners, and for harassing the rear of Lally's army, which was investing Madras in 1758-9 It was granted to the British as part of a *jagir* in 1750 by Muhammad 'Ali, Nawab of Arcot, for services rendered, and the grant was confirmed by Shah Alam in 1765.

During the wars with Hyder 'Ali, it was once taken and twice unsuccessfully besieged. On the last occasion it was relieved by Sir Eyre Coote in January 1781. The fort is in ruins and the railway runs through it. The royal apartments, the granary, the barracks and armoury, have all been razed to the ground, but two old buildings exist

The *Raja Mahal* is also known as *Ther Mahal* (Ther=car), on account of its shape. Timmu Raja built this "Ther Mahal" exactly in the form of the Conjeeveram car of Varadaraja Swami (p 621). It originally consisted of five storeys, one was subsequently pulled down. The unusual height of the structure was due to the fact that the Ranis of the Palace desired to worship daily at 12 o'clock, in sight of the temple of Conjeeveram. A series of arcades of Moorish arches surrounds a small inner dome-shaped room without a single piece of wood in its entire construction The roof of the dome-shaped room in the first storey is decorated with plaster-work, and was evidently used as a *mandapam* for the habitation of the household deities The staircases were straight, were all located inside, and ran parallel to and above each other from one storey to another The steps are extremely narrow

The lower storey of the residence of the Deputy-Superintendent of the Reformatory School was a Hindu temple, built for the use of the Prime Minister of the Raja. When the Fort was taken by the Muslims, this was partly converted into a mosque, and the Saracenic arch and the Hindu pillar exist side by side From the veranda of the upper storey a picturesque view is obtained, with the tank in front and a background of hills.

In the town is a temple dedicated to the monkey-god Anjaneya, who was a devotee to Kothandaramaswami (Rama with a bow). This was once within the fort and was transferred (1813) with the permission of the E I. Company.

Chingleput is the centre of the Tamil Missions of the Church of Scotland. Snipe shooting is to be had during the cold season 1 m from Chingleput are the Pallava Caves of Vallam, with archaic inscriptions

From Chingleput it is 19 m by motor-car or motor-bus to **Mamallapuram** (Mahabalipuram), or the **Seven Pagodas**, one of the most remarkable places in India.[1] There is a good road through Tirukalikunram (p. 627) to the Buckingham canal, which is crossed by ferry boat. There is a furnished two-roomed D.B. at Mamallapuram no servants except the watchman, and supplies are difficult to get

The official name of the Seven Pagodas is **Mahabalipuram**, believed to connect the place with the demon Mahabali, overpowered by god Vishnu in his *vamana-avatara*, or dwarf-incarnation It has been suggested that the village owes its existence to the Banas, who claim their descent from the demon Mahabali, or Mahabali - chakravartin There is, however, no evidence to show that the Banas extended their dominions so far But in ancient Chola inscriptions found at the Seven Pagodas the name of the place is Mamallapuram; this is evidently a corruption of Mahamallapuram, meaning the "city or town of Mahamalla" ("the great wrestler"), which occurs as a surname of the Pallava King Narasimhavarman I (625-45) in a mutilated record at Badami (p. 571) which he claims to have captured

The earliest inscriptions on the *Raths*, in the opinion of Professor Hultzsch, are *birudas* of a King named Narasimha. It is thus not unlikely that Mahallapuram, or Mavalavaram, was the original name of the village, and that it was founded and named after himself by Narasimhavarman

3 m. N of Balipitham, the landing-place, is Saluvan Kuppan, with two cave temples One of these is usually filled with drift-sand The other is carved with nine lions (or tigers') heads round the cells, and has two elephants' heads under miniature cells to the right of it.

Running S, and between the canal and the sea, distant nearly 1½ m, is a low granite ridge rising about 120 ft. above the plain in its highest part Upon this ridge are various excavations and carvings, on the E face of it is a famous relief of the *Penance of Arjuna* (p 626), and 700 yds. beyond the S extremity of it are the five monolithic temples called the *Raths*, all works, it is believed, of the Pallavas (p 617), and dating from the 7th century A.D. The modern village lies E. of the great relief, and the old temple lies beyond it again on the seashore

The visitor can go by boat to opposite the Raths, or by foot from Balipitham along the top of the ridge, or below its Eastern side, as he may feel disposed Every one will probably prefer to visit the

[1] A full description of the excavations and carvings at Mamallapuram will be found in the *Cave Temples of India*, by Mr Fergusson and Dr Burgess, and in the collection of papers published by Captain M. W. Carr in 1869 See also Fergusson's *Ind. Arch.*, 1, 171, 327-342, *The Seven Pagodas*, by J W Coombes, and *Archéologie du Sud de l'Inde*, Vol I, by G. Jouveau-Dubreuil (Paris, P Geuthner, 1914).

Raths first, as they are embryos of the Dravidian style, and of the Kailasa Temple, Ellora, absolutely unique in the whole of India, and then to work back to the N.

The monoliths known as **Raths** are assigned to the Pallavas The Dharmaraja Rath, the Ganesa Temple, the Dharmaraja-mandapa and the Ramanuja-mandapa bear inscriptions which prove beyond doubt that they were all shaped by Pallava Kings The Ganesa Temple and the Dharmaraja-mandapa are called *Atyantakama Pallavesvara - griha*. The same name is engraved on the outside of the third storey of the Dharmaraja Rath Perhaps the last was completed by Atyantakama, who might have constructed the remaining Raths as well as the Ganesa Temple and the Dharmaraja-mandapa

The Saluvan Kuppan Cave (above), N. of Mahabalipuram, was excavated by Atiranachanda-Pallava, and was accordingly called Atiranachanda - Pallavesvara-griha The identity of Atyantakama and Atiranachanda with any of the Kings known from the copper-plate grants remains to be established

Chola inscriptions in the Shore Temple at the Seven Pagodas mention three shrines at Mamallapuram — viz , Kshatriyasimha-Pallava - Isvara, Rajasimha - Pallava-Isvara and Pallikondaruliyadevar, which were apparently situated in the temple called Jalasayana—*i e* , the Shore Temple. Kshatriyasimha - Pallava - Isvara was in all probability the ancient name of the principal shrine in the Shore Temple Rajasimha-Pallava-Isvara might be the name of the smaller shrine in the same temple, while Pallikondaruliya probably denotes the shrine connected with the larger temple, where a large mutilated statue of the god Vishnu is lying

Probably the Pallava King Rajasimha built the smaller of the two shrines which go by the name of the Shore Temple. It is also possible that Kshatriyasimha was another name of the same King. In this case the whole of the Shore Temple must have been built by the Pallava King Rajasimha, who constructed the Kailasanatha Temple at Kanchipuram about the beginning of the 8th century A.D Besides these there are a number of caves which bear no inscriptions, but which may also be assigned to the Pallava period

The most Northerly of the Raths is called after Draupadi, the wife of the five Pandavas (see p. lvii, Introduction) It is the smallest of all, measuring only 11 ft. sq , has three storeys and a pointed roof, like a thatched Toda hut in the Nilgiris, rising 18 ft. from the ground, and once crowned by a stone finial The image of a goddess inside is popularly explained as Draupadi, but more probably represents Durga. At her feet are two kneeling figures, one of which is shown in the act of making an offering of his hair

West of the Draupadi Rath are an elephant and a lion carved out of single blocks of stone, and E of it is a *Nandi* bull These animals are the vehicles (*vahanas*) of the thunder-god Indra, the goddess Durga, and Siva, and were presumably intended to be placed in front of the respective shrines

The next Rath, named after Arjan, was probably a temple dedicated to Indra, whose effigy is shown in a niche in the back wall It is a copy of a terraced Buddhist Vihára. It measures nearly 27 ft. by 29 ft., and is 35 ft. high , it has four storeys, three with simulated cells round them, and the fourth of a dome-shape. In each round window decorating the cells is a head as

of a monk looking out of it. The basement storey has round it columns of the Elephanta type (p. 27), with lions at their base ;

The Bhima Rath comes next, and W. of this, outside the line of the other four, the Rath of Sahadeva and Nakula The Bhima is the largest of all, measuring 48 ft by 25 ft , and rising 26 ft from the ground. Only part of the hall has been excavated, the pillars having cushion capitals and lion bases (see above). The carved roof of the upper storey closely simulates the wooden form of a free structure of the kind

The Sahadeva Nakula Rath is smaller again, 18 ft by 11 ft by 16 ft high , it has an apsidal end on the S side, and is intended to represent a Chaitya (p lxxxvi, Introd) At the N. end is a porch with two pillars in front of a cell Simulated cells are represented on the terraces

The last Rath in the line, of Dharmaraja (or Yudhistir), resembles the Arjan Rath, but is a Siva Temple of the Pallava Narasimhavarman (625-45 A D) It measures 27 ft by 29 ft by 35 ft high, and has four storeys, the fourth a sort of dome or stupa. The columns have lion bases The Atya kanta inscription is on the third storey

Each work is carved out of a single mass of stone, and probably from a continuous outcrop

At the Southern extremity of the ridge there will be found on the isolated rocks near the E corner a representation of a Penance of Arjuna, and on the W side the Varáhaswami Temple, used for Hindu worship and not accessible

The **Great Bas-relief** of the **Penance of Arjuna**, 96 ft. long and 43 ft. high, dates from the 7th century. The N half of the relief is occupied below by two large elephants (one 17 ft. long) and four small ones, and above by a crowd of figures hurrying to the centre. In a cleft is a statue of the Nag Raja, overshadowed by a seven-hooded serpent, and of his wife below him, with other serpent-crowned figures and animals. On the Southern part is Siva with an ascetic, from whom the relief is named the Penance of Arjuna, on his left, and a large number of dwarfs, flying figures, human beings, and animals, including lions, monkeys, hares, deer, and birds, round him The lower part has been blocked out for more carving.

S of the relief is a large unfinished cave, known as the *mandapam* of the Pancha Pandavas, with two rows of pillars and models of cells on the façade , and farther again and not far above the S.E corner of the ridge is the Krishna *mandapam*, of later date than any of the other excavations, supported by twelve columns in four rows, and containing at the back a sculptured relief of Krishna holding up the mountain of Gobardhan (p 255). The central figure of a cow being milked is very natural

A little S. of the Lighthouse is the Yamapuri or Mahishamardini *mandapam*, a cave 33 ft. long and 15 ft. deep, with representations of the combat between Durga, wife of Siva, and the buffalo-headed demon, and of Vishnu reclining on the Shesh Snake , at the back of the cave are three cells.

N again, beyond some excavations and the Ramanuja *mandapam*, a cave 18 ft by 10 ft , with two pillars resting on lions' heads, are the excavations known as the Lion throne or couch of the Dharmaraja, and the bath or vat of Draupadi, nearly opposite the gateway of the Vishnu Temple, known as the Rayula Gopuram, which was begun about the 12th century, on the E. side of the

ridge above the great bas-relief, but was abandoned.

To the N. of the gopuram is a monolithic temple, called after Ganesha, measuring 19 ft. by 11 ft., and rising 28 ft from the rock It has three storeys, the two lower with simulated cells, and the carved roof of the topmost carrying a row of finials; the pillars of the base are of very slender and wooden form

N W of this, facing W., is a cave, 19½ ft by 9½ ft, with bold representations of (1) the Varaha, or Boar incarnation [1] of Vishnu, (2) elephants pouring water over Lakshmi, (3) Durga, (4) Maha bali and the Dwarf (Vamana) incarnation Farther N again is a cave on the W. side with another on the E side known as the Isvara *mandapam*, containing three shrines with statues of the Hindu Triad; there is a large stone bowl in front of the cave, and at the back of it a relief of elephants, and a monkey and a peacock Just beyond the N end of the ridge, and near the hamlet of Pillaiyan Kovil, is a life-like sculpture of three monkeys in the round.

A path leads from the bas-relief past a Lotus tank to the seashore temple, dating from the 8th century It is five-storeyed, a pyramid 60 ft. high and 50 ft. each way at the base. In front is a small temple, the original porch. Inside is a fallen lingam, and inside a vestibule on the W. of it is a recumbent figure of Vishnu, 11 ft. long; 75 ft. distant, in the sea, are the remains of a *dipa stambha*, or lamp pillar S of the temple are two rocks with recesses surrounded by lions' heads excavated on their W side. In front of these is a stone lion, and at the back an elephant's head and a horse All have to be protected from the sea air Excellent sea-bathing may be had, but care must be taken not to venture out too far

On the way back to Chingleput, a halt may be made at **Tirukalikunram** (7 m), where the road branches S, to Sadras There are two very fine temples—one on the hill and one in the village—a spacious and beautiful tank with steps all round, and a rock-cut temple, on whose pillars are many Dutch and some English signatures, ranging in date from 1664 to 1687 A D The temple in the village is full of ancient inscriptions Tirukalikunram, 'the sacred hill of the kites," or Pakshitirtham, "the sacred place of the birds," is a place of pilgrimage, and hundreds of pilgrims flock almost every day to see two sacred kites sumptuously fed on the top of the hill, from the hands of a priest, at the temple's expense.

Sadras (D B. fairly good), an old Dutch settlement (founded in 1647) lies on the Buckingham Canal 7 m. S of Mamallapuram. The place was once famous for

[1] The representation of the *Varaha* incarnation is fairly well done, but unfinished The central figure is the four armed Vishnu with a huge boar's head, who lifts up the Earth Goddess and places his right leg on the head of a snake-hooded figure issuing from the waves The latter is the giant Hiranyáksha, "Golden eye" who had carried off the earth into the infinite abyss Vishnu with the head of a boar pursued and slew him and saved the Earth' The representation of the *vamana avatara*, or dwarf-incarnation, is very spirited Vishnu, dilated to immense size, places one foot on the earth, and lifts another to the sky The god has eight arms, with which he holds a sword, a quoit, a shield, a bow, and a lotus, and with one he points The other two are indistinct Worshippers or attendants are at his feet, and other figures appear in the skies One to the W has the head of a dog The legend is that when Bali became Ruler over the whole earth Vishnu approached him in the shape of a dwarf and asked for so much space as he could cover in three steps Bali granted this modest request, whereupon Vishnu dilated to immense proportion, and planted one foot on earth, one on the sky, and with a third thrust Bali down to Hell.

its printed cottons. The ruined Dutch fort and the old Dutch cemetery are the principal objects of interest. Sadras was taken by the British in 1795 and restored to the Dutch in 1818; six years later it was made over to the British treaty, together with the rest of the Dutch settlements in India, in exchange for Fort Marlborough and other places in Sumatra. During the siege of Madras by Count Lally (1758-9) the ladies were sheltered here

Covelong (Kovilam) or Saadat **Bundar**, 15 m S. of Sadras on the N. of the Palar river, was a port built by Saadat Ali, Nawab of the Carnatic Labourdonnais landed troops here in 1746 It was taken by Clive in 1752 and destroyed

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ROUTE 35.

MADRAS to MANGALORE by way of **Salem** (for **Yercaud** and the **Shevaroy Hills**), **Erode**, **Podanur** (for **Coimbatore** and the **Nilgiris**), **Olavakkot**, **Shoranur** (for **Cochin**), **Calicut**, **Tellicherry**, and **Cannanore**, and from **Mangalore** to **Bombay** by sea.

The broad-gauge line of the South Indian Railway to the Nilgiris and Mangalore actually commences at **Jalarpet** Junction (Route 32, p. 599), 133 m from Madras Central The journey as far as (43 m) **Arkonam** Junction (opened 1856) (Route 26), and thence to Jalarpet (opened 1860), is made over the Madras and S Mahratta Ry system, on which the S I R have running powers.

From Jalarpet Junction (R) the railway to Erode was opened in 1861, and the stations are (mileage from Madras)

138 m **Tirupattur** (D B K) Jn N G ry to **Krishnagiri**, 26 m, one of Tipu Sultan's forts, in what was known as the Baramahal

167 m. **Morappur** junction N.G ry. to **Hosur**, 73 m, from which a large Cattle Farm is 2½ m distant, close to the Mysore border.

207 m **Salem** Jn (R) Salem town (pop 129,702), the headquarters of the District formed out of the Balaghat, Baramahal and Talaghat in 1792, is 3½ m. on a metre-gauge branch to (87 m.) Vriddhachalam (p. 645).

Another branch, broad-gauge, opened 1929, runs W. 25 m. to the (Stanley) **Mettur Dam** (1934) of the Cauvery River, the dam,

a mile long and 214 ft. high, has three times the volume of the Assuan Dam; the lake is 60 sq. m. in extent, and there is a hydro-electric plant (1937) feeding a large area.

Motor-bus services to Rasipur, Namakkal and Attur; also to Tiruchengodu, Mettur and Bangalore

Trushlongodu (3 m S W) temple is on a large hill with another at the base A hooded snake, 80 ft long, is carved half-way up

The Shevaroy Hills. Motor omnibuses (S) run from Salem Junction to **Yercaud** (21 m) by the ghat road Coolies can be hired for light packages; heavy luggage can best be sent by cart from Salem The scenery along the whole length of the road is magnificent The road has nineteen hairpin corners, which are not easy for a car with a long wheel base

Yercaud (Tipperary Hotel), a small town, the height of which varies from 4000 ft (at the lake) to about 4800 ft above sea-level, is essentially a place for a quiet holiday Bungalows are frequently available for a moderate rent in the season (April to June)

A few view-points are given below, with their approximate distances from Yercaud (Church gate):—

	Miles
Ladies' Seat	1½
Prospect Point	1½
Bear's Hill	1½
Pagoda Point	2
Killiyur Falls (after rain)	2½
Shevaroyan (5324 ft)	3½
Honey Rock	6½
Shengalvaray Precipices (2 m of difficult walking)	14

The Shevaroy Hills cover an area of about 100 sq. m., the elevation ranging from about 3500 ft. to about 5300 ft. There are excellent roads; the gradient is steep in places but negotiable. The district consists mainly of coffee and orange estates, broken up by picturesque villages and "greens," inhabited by hill-folk (Malayalis). Only the highest points (especially the Shevaroyan and the Green Hills) are cultivated and covered with short grass, varied by *shola* (evergreen hill-trees). A visitor will find a visit to a coffee estate full of interest and instruction. Botanists and entomologists will find a visit to the Shevaroy Hills a profitable investment of time

242 m The Cauvery River is crossed by a bridge 1539 ft long (1862)

245 m **Erode** junction (R. and D.B) Motor service (S) to Bhavani, 9 m. A broad-gauge branch (opened 1868, converted to metre-gauge 1879, and reconverted 1929) runs to (88 m.) **Trichinopoly** junction (Route 36, p 656) This formed part of the Great Southern Railway from Negapatam

On this branch at 21 m **Unjalur** station In an enclosure, several huge terra-cotta figures of horses and other animals can be seen from the train

41 m **Karur** station (D.B), on the Amaravati river, crossed by a bridge 1114 ft long (1867). This was the capital of the ancient kingdom of Chera, conquered by the Cholas in 990 The fort was constantly besieged both in ancient times and during the wars with Tipu Sultan. In 1801 it was abandoned as a military station The ruins of the fort and an old temple are interesting

85 m from Erode is **Trichinopoly Fort.**

303 m from Madras, **Podanur** junction (R). The Madras railway terminated here in 1862. Coim-

batore District Board (metre-gauge) line to Pollachi, 25 m., for Anamalai Hills, 14 m. distant. Motor service (S) from Pollachi to Valparai, near the Anamalai Hills. From Pollachi the line runs to 101 m., Dindigal (p. 660, Route 36). Motorable road from Pollachi *vid* Udamalpet (17 m) to (71 m) *Munnar*, 6000 ft. above sea-level, the centre of the **High Range** district of the Travancore hills Udamalpet (D B K.) is a station on the railway Tea estates are scattered through the district, and there are many opportunities for sport Mica has been found.

To Coimbatore and the Nilgiris

From Singanallur, an avoiding line (1939) for Mettupalaiyam (opened 1873) and the hill railway to the Nilgiris turns N, and passes to

307 m. **Coimbatore** station, 1398 ft. above sea-level (pop 160,348, D B), ceded by Tipu in 1792 All Souls' Church is ¼ m to the E., and there is a R C. Bishopric. The Agricultural College (1907) for sugar cane breeding, and farm, the Gass Forest College (1906), closed 1939, now a Craft Boys' Education School and Forest Museum, are 2 m distant

The great sight of Coimbatore (3 m) is the **Temple of Perur** A view of a pillar in it is given at p. 399, vol. I of the *Hist of Indian Architecture*. Fergusson says "The date of the porch at Perur is ascertained within narrow limits by the figure of a Sepoy loading a musket being carved on the base of one of its pillars, and his costume and the shape of his arm are exactly those we find in contemporary pictures of the wars of Aurangzeb or the early Mahrattas in the beginning of the 18th century." (The inscriptions copied at Perur refer themselves to the 12th century and later.) The bracket shafts are attached to the piers, as in Tirumal Nayak's buildings at Madura.

In front of the small temple is a **Dwaja Stambha** (stone flag-staff), 35 ft high The central shrine, desecrated by Tipu, is dedicated to Goshthisvara The shrine of Sabhapati, a name of Siva, occupies a subordinate position. There is a smaller temple to Patteswar They were both built in Tirumal's time (1623-59) There is one gopuram, with five storeys, about 55 ft high In the corridor leading to the vimana there are eight very richly-carved pillars on either side in the front row, and behind them eight smaller and plainer. From the ceiling hang stone chains, perhaps an imitation of the chains with bells which hang from the Dwaja Stambha The pillars represent Siva dancing the Tandava; Siva killing Gajasur, the elephant-headed demon, treading on his head and waving the skin, appropriate in a locality where wild elephants used to do such mischief, Vira Bhadra slaying his foes, and the Sinha, or lion of the South.

A road runs to Satyamangalam (44 m) and Kollegal (112 m).

328 m **Mettupalaiyam** station (R) From here the metre-gauge Nilgiri Railway, opened 1899 and extended 1908, ascends 4000 ft to (17 m) Coonoor, and to Ootacamund, 12 m farther on The Blue Mountain Express leaves Madras in the evening, arrives on the following morning, and Ootacamund is reached in 3 hrs. On the mountain gradient the ry is furnished for 12 miles with a central Abt rack rail, enabling it to ascend 1 in 12½, the extension being on a grade of 1 in 23 81. Care must be taken to guard against the drop in temperature of 20 to 30 degrees. On the road

to Ootacamund (32 m.) there are 13 hairpin bends in 19 m.

Coonoor is 6100 ft. above sea-level (D B K.) The climate is warmer than that of Ootacamund, the mean annual temperature being 65°, and the rainfall 55 in A Pasteur Institute for S India has been established here. The mildness of the climate has made Coonoor a favourite resort for persons of delicate health There are several hotels and boarding-houses, good tennis courts at the Wellington Gymkhana race-course, an excellent golf-course by an easy walk through Sim's Park. Lady Canning visited Coonoor in April 1858, and compared the view over the plains with that over the Mediterranean from the Corniche at Monte Carlo [1]

Sim's Park contains an excellent collection of plants. One shady dell is full of splendid tree-ferns and other ferns of large size, and is overshadowed by large trees of scarlet rhododendron Below the park is the *Wellington Race-course* A ride of 7 m. brings the traveller opposite to the *St Catherine's Waterfall*, which is N E of Coonoor The road leads for 3 m along the skirts of pretty copses (*sholas*), and then, turning off into a valley, reaches (4 m) a rocky bluff called *Lady Canning's Seat* Below, to the S and E , lie extensive coffee plantations. The path then descends considerably, and turns S E to a bluff overlooking the chasm into which the stream takes a leap of 250 ft into a very deep ravine

S W. of Coonoor there is another waterfall near Kartairi, which has been harnessed to supply electric power for the Government Cordite Factory at Aruvankadu, near Wellington—a huge enclosure with a high wall running round it for several miles

An *Excursion* may be made to the **Hulikal Drug**, or Tiger-rock Fort, which is on the summit of a hill that towers up to the left of the pass in ascending from Mettupalaiyam It requires a whole day from dawn to sunset, and is rather fatiguing. The road to it turns off at the first zigzag on the new ghat about 2 m. from Coonoor A rough bridle-path along the ridge leads to it The peak is about 6294 ft high, and commands in clear weather a splendid view

From the Post Office at Coonoor it is about 3 m to the barracks at **Wellington** At a very pretty fountain the road to the barracks turns off sharply to the left The buildings, 900 ft long, lie halfway up a very steep hill, on which is the Commandant's house, with a pretty garden. The barracks were built in 1860, and were added to in 1875. The water supply is brought from the Ralhia Plantations, 3 m away.

Motor-bus service (S), 13 m from Coonoor to Kotagiri (p. 634)

Ootacamund * (alt. 7440 ft), the summer headquarters of the Government of Madras, 9 m. from Wellington. The old road is well planted with trees, in parts it skirts a precipice.

The first Europeans to penetrate to Ootacamund were probably the surveyors, Keys and MacMahon, in 1812 Whish and Kindersley, members of the Madras Civil

[1] See *Two Noble Lives*, by A J. C Hare (George Allen, 1893)

Service, followed in 1818: John Sullivan, another civilian, came up in 1813, and in 1821 Europeans began to settle on the hill-top. Sir T. Munro (Governor) visited the Nilgiris in 1826, and Lord William Bentinck, as Governor-General, spent several months at Ootacamund in 1834.[1]

Ootacamund (*mund* = "village of huts") is surrounded by lofty hills. Of these Dodabetta on the E. is the highest, being 8640 ft above sea-level; but there are also other lofty hills, as Elk Hill, 8090 ft high. The *Lake*, which was made in 1823-25, is about 2 m. long from E. to W., but narrow. The principal *Church*, *St Stephen's* (consecrated in 1830), is near the Club, the Post Office, the Public Library, and the principal shops. The market is close to the E. end of the lake. St Thomas's Church (consecrated 1870) is on the S. side of the lake, and close to the Willowbund, with Hobart Park and the Racecourse on the E. The railway crosses the lake immediately to the W. of the bund, and the station lies N. of the lake, between Lake Road and Hadfield Road.

The *Botanical Gardens*, through which Government House (1880) is approached, were established in 1840 by public subscription, and are beautifully laid out in broad terraces one above another at the foot of Dodabetta, 1206 ft. above the gardens.

Ootacamund is a centre for the manufacture of quinine from the bark of Cinchona, introduced from South America in 1862. The plantation lies 3 m. N.E. from St Stephen's Church. New plantations at Naduvattam, 20 m. N.W., where the Govt. quinine factory is situated, were opened in 1864.

From Dodabetta ridge a most superb panorama is seen. To the S.E. is Elk Hill, behind which, and not visible, is the *Lawrence Memorial School*, 7330 ft. Farther to the S. of the lake is *Chinna Dodabetta*, or Little Dodabetta, 7849 ft., and in the far W. *Cairn Hill*, 7583 ft., Ootacamund itself and its lake, and St Stephen's Church Hill, 7429 ft. Beyond, to the N. of the lake, are still higher hills, as *Snowdon*, 8299 ft., and *Club Hill*, 8030 ft. The finest view, however, is to the E. Here is *Orange Valley*, where oranges once used to grow. To the N. is the Moyar Valley, termed the "Mysore Ditch," not artificial. To the E. are seen dimly the Gajalhatti Pass and N. Coimbatore mountains, covered with dense forests abounding with game.

The *Lawrence Memorial Royal Military School* at Lovedale, 4 m. from the Post Office, was adopted by Govt. in 1859, in accordance with the will of Sir Henry Lawrence. The boarder pupils are the sons and daughters of all ranks of the British Army in India, preference being given to those who have lost one or both parents.

The St George's Homes at Kairy (*Keti*), 5 m. S.E., are for orphan and destitute children of European descent. Headquarters of the Basel Mission.

The house occupied by the Club was built in 1831-32 by Sir William Rumbold, Bart., of the Hyderabad firm of Palmer & Co. He died in 1833, and it was rented by Lord William Bentinck, the Governor-General, who received Macaulay here as Member of the Bengal Council. The Government Secretariat on Stonehouse Hill occupies the site of the first house built at Ootacamund (in 1822-23, by Mr John Sullivan).

[1] Consult *Ootacamund*, by Sir Frederick Price (Madras, 1908).

In many of the grounds and along the roads are beautiful shrubs. Heliotrope has been known to grow to 10 ft. in height and 30 ft. in circumference, and a verbena to 20 ft in extent. The eucalyptus has been introduced from Australia.

N W. of the lake are the downs, with the golf-course. The downs, grassy slopes with copses (*sholas*) and boggy streams and hunted over by the Ootacamund Hunt (p 634), are known as the Wenlock Downs (after Lord Wenlock, a former Governor of Madras)

The **Murkurti Peak** (or *Taiganam*) is 16 m due W. of Ootacamund, among the mountains of the Kundas 5½ m can be driven, the remaining 10½ m must be done on horseback, or, by another route, 21 m can be driven, leaving 5 m only Refreshments must be taken. This peak is 8380 ft high, while Avalanche Hill is 8497 ft., and Kunda Peak 8304 ft. "It is a spot held sacred by the Todas as the residence of a personage whom they believe to be the keeper of the gates of heaven" The religion of this tribe, now dying out, is classed as Animist.

The road passes along the ridges of the Governor Shola range of hills, crosses the Parsons Valley and Krurmund streams, and for some distance follows the windings of the Murkurti stream, which is the head of the Paikara river.

An easy ascent of 1½ m. leads to the summit of the peak Towards the S the N termination of the Kunda range may be seen rising in abrupt escarpments and precipices. The N. side of the mountain is a precipice of at least 1500 ft, and it seems to have been cut sheer through the centre

On the W. side are the paddy flats of the Wynaad, and the plains of Malabar as far as the Arabian Sea.

The Murkurti Dam, 100 ft. high, at an altitude of 6795 ft, is reached by the Gudalur road (14 m.) and then 6 m S. This hydro-electric project (opened 1938) supplies power as far south as Ramnad and links with the Mettur generators

Other sights on the Nilgiris are the *Waterfalls at Kal-Hatti* and the *Paikara Falls* (utilised since 1932 for purposes of electric power) at the N W corner of the plateau In the heart of the Kundas the Bhawani Falls, 400 ft. or 500 ft. high, are surrounded by scenery of the most savage grandeur, but are difficult of access The *Ranga Swami Peak* may also be visited The native villages of the Todas (the aboriginal hill tribe) and other tribes may be seen in these expeditions.

Stone circles, which the Todas call *Phins*, and which contain images, urns, relics, and some very prettily-wrought gold ornaments, are found in many parts of the hills; but the most convenient locality is the Hill of Karoni, 3 m to the S. The circles are built of rough unhewn stones, some of them of large size, which must have been brought from a considerable distance.

The tea industry flourishes. Sport is varied and interesting Along the jungle-clad slopes of the plateau and in the extensive forests on the Wynaad plateau roam herds of elephant and bison, which in old times used to mount to the Kunda plateau Tigers are shot, and those that have lived long on the plateau exhibit magnificent furry coats

Panthers are numerous, and the black variety, so rare in most

parts of India, is less uncommon here. Owing to the exertions of the Nilgiri Game Association, which was founded in 1877, the game is strictly preserved.

The Nilgiri "ibex," a unique genus of the goat tribe, whose habitat is confined to the Madras Presidency, is found along the precipitous sides of the plateau. Owing to the extreme wariness of the ibex and to the dangerous nature of the ground, the sport of ibex-stalking calls for a steady nerve On the plateau, too, occurs the little barking deer or Muntjac, locally known as the "jungle sheep," although less common than formerly

The chital, or spotted deer, the most beautiful of all the deer family, frequents the lower slopes of the plateau and the valleys of the Moyar and the Bhavani rivers, and here, too, are found the mouse-deer and the four-horned antelope

To the list of large game may be added the sloth bear, the hyena, and the wild boar, an enemy to the potato crops of the peasantry

The brown monkey and the grey langur may be seen on the Mysore road below the Gudalur Ghat, and the black Nilgiri monkey in the wilder parts

From September to March snipe may be found, and small bags are compensated for by the pleasure of being able to use spaniels and other English sporting dogs to put up the birds The woodcock, the solitary, and the wood-snipe are all found during these months The only indigenous game-bird is the "jungle cock," crowing at sunrise and sunset They are carefully protected and encouraged by the Game Association, which has also been at considerable trouble to introduce other sporting birds.

Below the plateau there are quail, the common brown partridge, the spur-fowl, and pigeons, two species of which, the Nilgiri wood - pigeon and the Imperial pigeon, are found on the plateau also

For the fisherman the Nilgiris have also special attractions. The Moyar and the Bhavani and their tributaries are the home of the mighty mahsir and the Carnatic carp The rivers are under strict conservancy On the plateau streams have been stocked with trout since 1863, and sport can be obtained with a very moderate expenditure

The Ootacamund Hunt has a history dating from 1847, unbroken except during 1857, and has a pack of foxhounds, partly imported and partly reared The hunting season lasts from April to the end of October There are no foxes, but the hill jackal is a very different animal from his brother on the plains A really good horse and stout nerve are required to see the finish of a run.

Kotagiri, the oldest station on the Nilgiris, is 13 m from Coonoor and 18 m from Ootacamund. A motor-bus service runs from Coonoor ry station in connection with the up and down mail trains, the journey takes 1 hr. Kotagiri is 6511 ft above sea-level. There is a golf-course of nine holes Magnificent views on the road to Ootacamund and also on the road to Kodanad, 6 m N by E. The temperature of Kotagiri is half-way between that of Coonoor and Ootacamund; the average for the year may be put

at 62 degrees. The rainfall is approximately the same. Lord Dalhousie spent three months in the autumn of 1855 at Kota Hall, the oldest house in Kotagiri, in a beautiful situation looking down on the ghat. Lady Canning also stayed there in 1858 during her visit to Coonoor. 1 m W. of Kotagiri is the hamlet of *Dimhatti*, where the first English bungalow was built in 1821

Podanur Junction to Cochin

From Podanur (alt 843 ft) the railway runs through a gap in the ghats, 20 m. broad, known as the Palghat gap, the only real break in the 600 m of the W Ghats. It was extended to Calicut in 1888 All this portion of the line runs through dense forest, with views of the bare mountain-side close at hand on the N The mountains on the S side of the pass are only visible in the distance

333 m **Olavakkot** junction, for a short line (3 m) to Palghat (D B K), the second town of the Palni District The fort, built by Hyder 'Ali in 1766, was captured in 1784, and again in 1790 The glacis, moat and walls are in good preservation

360 m. **Shoranur** junction (R). Across the Ponnani River is a D B. A broad-gauge line (opened 1927) runs N. (42 m.) to **Nilambur** through the Moplah country, Nilambur is famous for its teak forests.

S of Shoranur the broad-gauge (converted from metre-gauge, as opened in 1902) Cochin State Railway crosses the Ponnani river and enters Cochin State, running (21 m.) to Trichur and (65 m) to Ernakulam.

At **Trichur** (21 m.; D.B.K.) there is an ancient temple of Vadakunnathan, possibly a Buddhist shrine, also a Museum and a Zoological Garden, which may contain a King cobra. The old British Residency, built during the time of Saktan Thampuran as a residence for Major Lethbridge, Commandant, is used, since 1919, as a Palace. In Hannington Gardens is the King George V. Silver Jubilee Hall (1939) Between Trichur and Cochin is a most picturesque backwater.

At **Chowera** is an aerodrome on the Madras-Trivandrum run.

Alwaye (54 m), where the railway crosses the Periyar river into a belt of the Travancore State, is a health resort in March to May on account of the excellent bathing

Ernakulam (65 m), capital of Cochin State (D B K) Maharaja, His Highness Sri Sir Rama Varma, G C I E, died 1941, aged 79, and there is a bronze statue on the foreshore The area of the State is 1417 sq m Across the lagoon, on Bolghotty island, is the British Residency, built by the Dutch in 1744, with a beautiful garden

3 m across the lagoon, at the N. end of a long, sandy spit, is the town of British Cochin (D B K), Kuchi Bandar (1 sq m.). At the N W end are the remains of the old Portuguese fort of St Emanuel An old tombstone, with a Portuguese inscription and the date 1524, is in the Post Office compound in Parade Road The S. of the town is Cochin State territory, known as Mattancheri

Between Vypin island on the N. and Cochin town on the S. is the harbour mouth (1932). A channel 16,000 ft. long and 450 ft. wide has been cut through the bar and deepened to 37 ft at low water, and this connects the deep sea with backwaters and canals extending some 100 miles.

An island, the Willingdon Island, named after the late Viceroy, Lord Willingdon, has been reclaimed E of British Cochin. One mooring, berth can take vessels up to 700 ft. in length and 25,000 tons gross Cargo and passenger liners call regularly at the port A few buildings of modern type, but founded on the old Dutch models, such as the Harbour House and the Malabar Hotel, have sprung up on the Willingdon Island A scheme for the development of the harbour (known as the fourth-stage works) began in 1936, and the port is equipped with deep-water wharves, transit sheds, warehouses, and through railway connections with the broad-gauge system of India

At the S. end of the long main street, in Mattancheri, is the Jews' quarter, with two synagogues That of the white Jews is floored with Chinese 18th-century tiles The Jews are divided into two sections—the Black, who claim to have settled on this coast in the 3rd and 4th century A D , and the White, who are believed to have arrived here at a much later date. Black Jews possess a copper grant from the Brahman Prince of Malabar, which is dated 388 A.D , or, according to Buchanan-Hamilton, 490 A.D The oldest tombstone in the *Beth-haim* (" House of Life "), or Jewish cemetery, at the back of the Jews' quarter, is dated 1666

The old Mattancheri Palace, containing some frescoes from the Hindu epics, was built by the Portuguese in 1515 for the Ruler The Maharaja usually resides at the Hill Palace at Tripunithura, 5 m. from Ernakulam. His " snake boats " (32 rowers) may be seen. Elephantiasis (alternatively known as " Cochin leg ") is unhappily common in Cochin

Cochin is of special interest as the earliest European settlement in India. A friar Jordanus visited it in 1324, Ibn Batuta in 1347, a Chinese in 1409, and a Persian in 1442. In 1500 the Portuguese adventurer Cabral landed at Cochin and met with a friendly reception, returning to Portugal with a cargo of pepper He was followed by Juan da Nova Castelho In 1502 Vasco da Gama, on his second voyage, came to Cochin, and established a factory

Albuquerque, the Portuguese admiral, arrived (1503) in time to succour the Cochin Rāja, besieged by the Zamorin of Calicut He built a wooden fort, " Manuel Kolati," or Fort St Emanuel, on Cochin Island Franciscan friars, who accompanied him, erected a chapel where the Church of St Francis stands

Upon Albuquerque's return the Zamorin invaded Cochin , but Duarte Pacheco resisted all attacks and forced him to retreat to Calicut In 1505 Francisco Almeyda, the first Portuguese Viceroy (without territory), came with a large fleet, and was in 1510 succeeded by Albuquerque On Christmas Day 1524 da Gama died here, and was buried in the principal chapel of the Franciscan monastery, then dedicated to St Anthony. His body was afterwards (1538) removed to Portugal, and rests in the Belem Convent at Lisbon, but his tombstone is in the church.

In 1530 St Francis Xavier, the apostle of the Indies made many converts. In 1557 the Church of Santa Cruz was consecrated as the cathedral of a Bishop. In 1577 the Society of Jesus published at Cochin the first book printed in India. In 1585 Cochin

was visited by the English traveller Ralph Fitch in the course of a voyage from Ceylon to Goa.

In 1616 the English (Keeling) engaged to assist the Zamorin in attacking Cochin, on an understanding that an English factory was to be established there, which, however, was not founded until 1635. In 1663 the town and fort were captured from the Portuguese by the Dutch, and the English retired to Ponnani. The Dutch greatly improved the place and its trade, but the Franciscan Church, which still survives, with interesting Portuguese and Dutch monuments on each side, was converted into a Protestant chapel, and the cathedral was turned into a warehouse.

In 1773, the north part of Cochin was subjugated by Hyder 'Ali up to a strip taken by Travancore (1757) across which the Vypin lines were made (1764). Tipu Sultan attacked the lines (1789) and war with the British resulted. By treaty protection was secured for an annual subsidy. In 1795 Cochin town was taken by the British under Major Petrie from the Dutch, the governor refusing to obey orders from the Stadtholder to surrender it, and in 1806 the cathedral was blown up, on orders from England.

The Malabar Backwaters.[1]—By a network of lagoons and canals the entire journey from Ernakulam to Quilon (p. 668) can be made by water. The S.I. Railway issue special tickets for the following circular tour. Madras to Ernakulam by rail *viâ* Shoranur, from Ernakulam to Quilon (86 m.) in a reserved portion of one of the steamers (Malabar Navigation Co., Cochin) or by private motor-launch (the journey may be broken at Alleppey, D.B.K.); from Quilon by rail (38 m.) to Trivandrum (p. 668). The return journey to Madras is made by rail *viâ* Shencottah, Tinnevelly and Madura (Route 36) over the Southern Ghats.

[1] See the fourth chapter in *A Wanderer's Log*, by C. F. Bechhofer (Mills & Boon, 1923).

Alleppey, the chief port of Travancore, is built on either side of the main waterway, with occasional bridges over wide canals. There is an extensive industry in coir matting and export of coir.

Christians in Malabar. In both Cochin and the neighbouring State of Travancore Christians, known as Nazaráni (*i.e.* Nazarenes), are numerous. Tradition ascribes the first conversions to the Apostle Thomas, at Cranganur (A.D. 52). After the condemnation of the Nestorian heresy by the Council of Ephesus in 431 A.D. colonisation by Syrian refugees and conversions among high-caste Hindus followed.

When the Portuguese landed, they found a flourishing Christian community, chiefly Nestorian, and governed either by bishops sent by one or other of the Eastern patriarchs or under Metrans (Metropolitans) of their own. Their prosperity and influence is a striking tribute to the tolerance of the Hindu rulers of the two principalities which continues. At first the Portuguese made no attempt to interfere with the doctrines or ritual; but, after the Inquisition had been set up at Goa in 1560, proselytism began, accompanied by, in the main successful efforts to cut off the Syrian Christian Maronites from communication with the Patriarchs

by interception of their correspondence and by seizure and imprisonment of several Bishops on their way from Asia Minor to take charge of Malabar sees

The first fissure in the Christian Church in Malabar dates from 1663 Mar Gregory the Bishop, who was sent by the Patriarch of Antioch in 1665, being a Jacobite; the majority henceforward became known as the Jacobite Syrians, while the minority who adhered to the Church of Rome, are called Romo-Syrians In 1663 the Dutch captured Cochin and an era of tolerance followed, but internal dissensions and disputes in the matter of doctrine and liturgy continued.

Of Roman Catholics, some use the Latin rite under the Archbishop of Verapoly (Cochin) and the Bishop of Quilon, chiefly recent converts from the lower castes, and Romo-Syrians under Indian Vicars-Apostolic, owing allegiance to and appointed by the Pope of Rome Then there is the so-called Nestorian Church under a Bishop from Mardin appointed by the Patriarch of Nineveh and the Mar Thoma Christians under Metrans appointed by the Patriarch of Antioch, who are Romish in doctrinal beliefs but do not acknowledge the Papal supremacy. The Reformed and Jacobite Churches divided (1896) under separate Metropolitans. Among the Protestants two flourishing communities are directed by the Church and London Missionary Societies.

Kottayam (D B.K.), 45 m. S.E. of Ernakulam, is the chief Christian centre in Travancore and the see (1879) of the Bishop in Travancore and Cochin, who is also the head of the C.M.S. Mission in the two States. The C.M.S. has been working in this field since 1817, when a College was founded by Major John Munro, the Resident.

Periyar is S E of Cochin about 120 m *viâ* Kottayam, and about 70 m S. of Kodaikanal (p. 661, Route 36), alt 3000 ft. The dam of the Periyar river irrigation scheme is 1240 ft by 173 ft. high Water which flowed to the Indian Ocean has been turned so as to flow into the Bay of Bengal by the Vaigai river, irrigating the country, through a tunnel of a length of 5940 ft This work was carried out under the control of Colonel John Pennycuick, C S I, R E (1888-95)

Main Line to Calicut and Mangalore.

The main line proceeds from Shoranur Junction (p 635) to

388 m from Madras, **Tirur** (D.B) Roads for Ponnani and Malappuram meet here On the backwaters motor-boats ply, in connection with the trains, to

Ponnani (D.B); a religious centre of the Moplahs (Mappillas), a fanatical Muslim sect peculiar to the W coast; and the place of residence of the Makhdum Tangal, their spiritual head. The religious college over which he presides is attended by *Mullas* from all parts of Malabar. His office is hereditary in the female line, in conformity with the custom among Malabar Hindus. Malappuram, 14 m. from Tirur, is the centre of a country in which there have been many outbreaks of the Moplahs.

393 m. **Tanur** (D.B.). The Government Fisheries Department has a fish-curing and canning factory here. A fine mosque. Visited by St Francis Xavier, 1546

407 m the Ferok River is crossed to Ferok station, for the port of Beypore.

414 m. **Calicut** station (D.B., also an hotel) Anchorage 2 m from shore. Golf-course Motor-bus services to Manjeri (30 m) and to Vayittiri (39 m), on the ghat road from Calicut to (131 m) Mysore City (p 596) through the Wynaad (see p 641), also to Ootacamund

Buchanan-Hamilton[1] says "When Cheruman Perumal had divided Malabar, and had no principality remaining to bestow on the ancestors of the Tamuri, he gave that chief his sword, with all the territory in which a cock crowing at a small temple here could be heard This formed the original dominions of the Tamuri, and was called Colicudu, or the Cock-crowing." Others have held that the name of the place is Kallikot, the fort on the Kallayi river The term Tamuri used by Buchanan-Hamilton is a corruption of *Samutiri*, or sea-lord, and was, before 1500 transformed into Zamorin It is still the title of the Raja (a personal title) of Calicut, who enjoys a pension

To the S the Moplah quarter has several mosques To the N. at West Hill railway station, 3 m. from Calicut railway station, there are barracks. In the centre is the Anglo-Indian quarter, with a R C Church and an English Church, and near the Judge's Court are the remains of the old palace and a new palace.

[1] *Journey through Mysore Canara and Malabar* (1807), vol 2, p 474.

In the old burial-ground close to the pier is interred Henry Valentine Conolly, Collector and Magistrate of Malabar, who was murdered by Moplahs in September 1855. The oldest inscription that can now be read is to Richard Harrison, who died on 14th April 1717. Facing the sea are houses of the European residents, and the Custom House, and also the Club. The Collector's house is at East Hill, near the barracks of West Hill There is a temple in Talli, the Brahman quarter Cotton cloth, originally exported from this town, derives from it its name of *calico* The Commonwealth Trust has a large textile factory taken over from the Basel Mission

At Calicut, on 20th May 1498, arrived Vasco da Gama, after a voyage of ten months and two days from Lisbon, recorded in the "Os Lusiades" of Camoens. Calicut and the adjoining coast were, at that time, under the suzerainty of Vijayanagar (p 575): and the town contained a Brahman temple A memorial tablet swept away by the sea was restored in 1939 In 1509 the Marechal of Portugal, Don Fernando Coutinho, made an attack, but was slain and his forces repulsed with great loss In 1510 Albuquerque landed, burnt the town, and plundered the palace, but was eventually obliged to sail away with great loss In 1513 the Zamorin made peace with the Portuguese, and permitted them to build a fortified factory.

English factors came (1616) to a factory In 1695 Captain Kidd the pirate ravaged the port In 1766 Hyder 'Ali invaded the country, and the Zamorin, finding that offers of submission would be in vain, barricaded himself in his palace, and, setting fire to it, perished. Hyder 'Ali soon left, and the

territory revolted, but was reconquered in 1773. In 1781 the victors were expelled by the British, under Abingdon, from Tellicherry, but in 1789 Tipu Sultan overran the country and laid it waste. Cocoanut and sandal trees were cut down, and plantations of pepper were torn up by the roots The town was almost entirely demolished, and the materials carried 6 m to the S.E., to build a fort and town called *Farrukhabad*, "Fortunate City" The next year Tipu Sultan's general, Martab Khan, was totally defeated and taken prisoner by Col Hartley at Tirurangadi, 15 m. S of Feroke, who captured the so-called "Fortunate City"; and in 1792 the whole territory was ceded to the English Government by the Treaty of Seringapatam

It is said that two pillars of the old palace in which da Gama was received still remain The Portuguese leader knelt down on his way to some Hindu idols, taking them for distorted images of Catholic saints. "Perhaps they may be devils," said one of the sailors. "No matter," said da Gama, "I kneel before them and worship the true God"

The railway was opened to Cannanore in 1903, and to Mangalore in 1907

451 m **Mahé** (named after M. Mahé de Labourdonnais when he captured it in 1725—originally called Mayyazhi) is a dependent territory of 2½ sq. m., belonging to the French—their only possession on the W. coast, under an Administrator

It is finely situated on high ground overlooking the river, the entrance of which is closed by rocks. None but small craft can pass the bar in safety, and that only in fair weather; but the river is navigable for boats to a considerable distance inland. On a high hill some way off is seen the Mission House of the Basel missionaries at Chombala From this hill there is a beautiful view of the wooded mountains of *Wynaad*

Mahé was taken by the British under Hector Munro in 1761. The Peace of Paris, in 1763, gave it back to the French, but it was retaken by the English in 1779, and in 1793 the British establishment at Tellicherry moved to Mahé, but, the place being restored to the French in 1817, the officials returned

Mahé possesses the institutions of a republic—manhood suffrage, vote by ballot, municipal and local councils, and representation at the *Conseil Général*, which sits at Pondicherry. The *Administrateur*, appointed from France, represents the central, and the *Maire* the local, Government (see p 648) Excellent fishing

456 m. **Tellicherry** (D B.K.) Anchorage 1½ m from shore Motor service to Iritti, 32 m., at the bottom of the Periambadi Ghat (p 598), good mahsir fishing. There is a reef of rocks which forms a natural breakwater In 1783 H.M. ship *Superb*, of seventy-four guns, was lost here. The fort is built on a rising ground close to the sea, and is about 40 ft above its level The whole of the N.W. side of the citadel is occupied by an old lofty building The town contains good examples of the better Moplah houses The main bazar street is one of the most fascinat-

ing in Malabar, and the coast scenery is delightful: good bathing and an excellent club.

The English factory at Tellicherry, which was established chiefly for the purchase of pepper and cardamoms, was first opened in 1683, under orders from the Presidency of Surat. It was the first regular English factory on the Malabar coast. In 1708 the East India Company obtained from the Chenkal Raja a grant of the fort. In 1781 Hyder 'Ali attacked the place, but was compelled by a vigorous sally of the garrison, under Major Abingdon, to raise the siege.

The *Cardamoms and Coffee of the Wynaad and S Coorg* are exported from Tellicherry. The **Wynaad** is a plateau about 3000 ft. above sea-level in the E. of the Malabar District, containing many tea, coffee, and pepper estates.

Two main roads lead into the Wynaad, both are practicable for motors. The Calicut-Mysore road (p 597) passes through the planting centres of (39 m.) Vayittiri (small R H, Club) and (65 m.) **Manantoddy** (2558 ft above sea-level, D.B.) About 2 m. from Manantoddy on the banks of the river is the *Vallurkavu*, or Fish Pagoda, dedicated to the goddess Durga. The carp are sacred, and merit is acquired by feeding them. At Kalpatta (6 m. from Vayittiri) a branch road (motorable) runs through (14 m.) Sultan's Battery (Ganapathivattam) to (48 m.) Gundlupet in the Mysore State, and thence (36 m.) to Mysore City.

The other road runs from Tellicherry to (48 m.) Manantoddy, with a good bus service.

Sultan's Battery is a fort built by Tipu Sultan on the site of the police station. 4 m. E. of Sultan's Battery is a natural fissure in the rock; the walls are covered with crude drawings and there are four inscriptions (see *Indian Antiquary*, vol. 30).

469 m. **Cannanore** (D.B.K., not good, but two good hotels; also a Club, golf-course, and good sea-bathing). Anchorage 2 m. from shore. The Cantonment is on a jutting portion of land, which forms the N.W. side of the bay. Near the end of this is a promontory, on which stands Fort St Angelo, built by the Portuguese (1505). Since acquisition by the British, it has been improved and strengthened. The cliffs are from 30 ft. to 50 ft. high here, with piles of rocky boulders at their feet. The bungalows of the officials are most of them built on the edge of these cliffs, and enjoy a cool sea breeze. Farther inland, and in the centre of the Cantonment, are the *Church*, magazine, and English burial-ground, contiguous to one another. The Portuguese Church, once the Portuguese factory, is close to the sea. The old Moplah town, with some picturesque mosques, the Raja's palace and narrow crooked lanes, lie round the Bay to the S. of the Fort. The Portuguese were expelled by the Dutch, who subsequently sold the place to a Moplah family, the head of which is called the 'Ali Raja (sea-lord), or Bibi, if a woman. His territory consisted of the town and a little of the adjacent country on the S., and he also claimed sovereignty over the Laccadive islands. These islands were sequestrated for mismanagement, and were administered for over thirty years by the Collector of Malabar. Eventually in 1911 they were finally ceded, and the Raja was given a pension.

In 1768 'Ali Raja, then ruling Chief, readily submitted to Hyder 'Ali, and joined him on his invading Malabar. In the war with Tipu Sultan, in 1784, Cannanore was occupied by the British; but on the conclusion of peace next

year it was restored to the Bibi. She again dallied with Tipu Sultan, and Cannanore was finally stormed and captured by General Abercromby in 1790. Major-General Hartley, who was in military and civil charge of South Malabar (1793), died here in 1799.

473 m. **Ashikkal** or Baliapatam (Valarpattanam), on a river crossed by a bridge 1288 ft long (1906). Close by is the bold bluff eminence of **Mount Deli** (720 ft) on the coast, a well-known landmark. It was the first land in India sighted by Vasco da Gama on 18th May 1498, on his way S. to Calicut.

521 m. the Payasavali river-bridge is 1288 ft. long.

543 m. the Netravati River is crossed by a bridge 2550 ft long (1907).

550 m. **Mangalore** headquarters of the S. Kanara District (D.B.K. and P.W.D. Inspn. Bungalow at Kadri). The place is separated from the sea by a backwater round two sides of a peninsula. At the back of the present landing-place the great bazar commences, and stretches N. on the edge of the backwater about ½ m. From the hill on which the old light-house stands a remarkable view of the coast and the hills can be had.

In ancient times Mangalore was a place of very great commerce. Ibn Batuta, in the middle of the 14th century, mentions 4000 Muslim merchants as resident there. Forbes speaks of it, in 1772, as the principal seaport in the dominions of Hyder 'Ali. Both Hyder 'Ali's and Tipu Sultan's ships of war were built at Mangalore of the fine teak produced on the slopes of the Western Ghats. Coffee is exported from Coorg and Mysore, but this is the principal cashew nut port in the world.

Mangalore, captured by the British in 1768 for a time, was gallantly defended by Colonel John Campbell, of H.M. 42nd Foot, from 6th May 1783 to 23rd January 1784, with a garrison of 1850 men, of whom 412 were British soldiers, against Tipu Sultan's whole army, but in the end had to surrender with all the honours of war.

The *Swiss Mission* has resigned its commercial activities—printing, book-binding, carpentry, tile manufacture, etc.—to the Commonwealth Trust. There are two colleges affiliated to the Madras University—the Government College and the *Jesuit College of St Aloysius* (Museum).

There is an obelisk in the *Burial-ground* to the memory of Brigadier-General John Carnac, who died here, aged eighty-four, in 1800. He commenced his military career in India with the 39th Foot (*primus in Indis*) and entered the service of the East India Company in 1758.

There are three places containing interesting Jain buildings, viz., Mudbidri, Karkal, and Venur. At Mudbidri, in a stone temple with pitched roofs, are remarkable Jain carvings. at Karkal and Venur are colossal images, the third—there are only three in the world—being at Sravana Belgola. Mudbidri is 22 m. N.E. by a good road, and Karkal is 12 m. farther N., Venur is 16 m. farther E., and not easily accessible. Motor-bus services (S.) to Karkal, Mudbidri, Udipi, Kundapur, to Bantval, Beltangadi, Puttur, to Mercara in Coorg; and to Shimoga in Mysore.

From Mangalore to Bombay by Sea.

Mangalore is the terminus of the West Coast Section of the S. Indian Railway; it is also the ultimate port of call from the middle of

September until the middle of May for a service of steamers, twice a week, to Bombay (412 m), maintained by the Bombay Steam Navigation Co. (Shepherd & Co.), of which Messrs Killick, Nixon & Co. (120 Frere Road, Bombay) are the managing agents The steamers leave Mangalore every Sat and Tues morning and arrive at Bombay (Alexandra Dock, Ferry Wharf) in two days, calling *en route* as below.

Malpe (35 m from Mangalore by sea) is the best natural port in S Kanara; the roadstead is sheltered by the island of Darya Bahadurgarh 3 m to S W are St Mary's Isles, where Vasco da Gama landed in 1498 and set up a cross

Kundapur (19 m from Malpe), S of an estuary into which three rivers flow, an ancient port which dates back to the time of the Bednur Kings (16th century) The ruined city of *Bednur* (Hydernagar), in the Mysore State, lies about 30 m inland on a high plateau, about 4000 ft above sea-level, here General Mathews surrendered to Tipu Sultan in 1783

Bhatkal (19 m from Kundapur) is the first port in the Bombay Presidency and lies 3 m from the mouth of the river It was the port for Vijayanagar, *vid* Honawar, higher up the coast An English factory was opened (1637) by the Courteen E I Coy, but in 1670 a bulldog, belonging to the chief, killed a cow, and the factors, ten in number, were murdered [1]

Kumpta (31 m from Bhatkal) is on a tidal creek to S of Tadri river; vessels anchor ½ m off the mouth.

Tadri (7 m.) is a small port at the mouth of the river; vessels anchor off the bar.

Karwar (D.B, 22 m. farther N.) is the hdqrs of the district of N Kanara, anchorage 500 yds from the shore, on the Kalinadi river. From 1638 to 1752 an English factory was established here and carried on a trade in pepper. The N. fort was taken by the Portuguese in 1752, and by 1801 old Karwar (3 m E.) was in ruins. There is a lighthouse on the Oyster Rocks, and 5 m. to the S E. is the island of Anjediva (Portuguese), where many English soldiers died, awaiting the transfer of Bombay. For Mormugão (Goa), which is 45 m from Karwar, see p 542 (Route 27).

Vengurla (20 m from Mormugão and 196 m from Bombay). It was ceded to the British in 1812 by the Rani of Sawantwari, and is situated on the border of that State In former times it was notorious as a haunt of pirates. The public offices are in the old Dutch factory (1638); a British factory was established here in 1772 From Vengurla the steamers proceed direct to Bombay

At Ratnagiri (84 m. N of Vengurla) King Thibaw of Burma was interned (1886)

The coasting steamers of the British India Steam Navigation Co call at Mangalore at no fixed dates

[1] See Capt Alex Hamilton's *New Account of the E. Indies* (1744) The story, however, is believed to be fiction

ROUTE 36.

MADRAS to COLOMBO by the South Indian Railway, by way of **Chingleput, Tindivanam** (for **Gingee**), **Villupuram** (for **Pondicherry**), **Cuddalore** (for **Fort St David**), **Porto Novo, Chidambaram, Mayavaram** (for **Tiruvarur** and **Tranquebar**), **Kumbakonam, TANJORE** (for **Negapatam**), **TRICHINOPOLY, Dindigal, Kodaikanal, MADURA** (for **Tuticorin, Tinnevelly, Kuttalam, Cape Comorin, Quilon** and **Trivandrum**), **Rameswaram** and **Dhanushkhodi** (for **Talaimannar in Ceylon**).

The Ceylon Boat Mail train runs from Madras to Dhanushkhodi (456 m). There is a ferry to Talaimannar and a railway runs to Colombo. The railway to Villupuram was opened in 1877. The section from Beach Station to Tambaram, 18 m., was electrified in 1931.

Madras Egmore station (p 605).

35 m. from Madras is **Chingleput** junction (R., D.B. ¼ m.) for Conjeeveram (Route 34) and Arkonam, junction (R.), on the railway to Poona and Bombay (Route 28).

45 m. The Palar River is crossed by a bridge 2296 ft. long (1878), and by a road causeway.

76 m. **Tindivanam** station (R., D.B.)

(1) 24 m. N.W. of this station is **Wandiwash** (Vandivasu). Here may be seen a ruined fort and, 2 m. to the N., a rocky hill. Between the hill and the fort was fought, on 21st January 1760, the battle which broke the French power in S. India. Count Lally had been holding Wandiwash, but was obliged by a mutiny of his troops to withdraw to Pondicherry. Coote[1] occupied Wandiwash in November 1759, and left a garrison which Lally continued to besiege while Coote was returning against the advice of Bussy. Lally was defeated with heavy loss and the capture of all his guns, ammunition and stores. The battle was fought by the Europeans only, the sepoys looked on, Bussy being taken prisoner.

On 21st January 1781, Coote arrived at Wandiwash to relieve Lieut. Flint, who had been gallantly defending himself in the fort for six weeks against Hyder 'Ali. He had been directed to take over the fort from a rebellious killadar of Muhammad 'Ali, and forced admission at the point of the bayonet. Coote recommended Flint for immediate promotion to captain. The Court of Directors refused, on the ground that promotion must go by seniority! The fort was abandoned and blown up in February 1783.

(2) 18 m. W. of the Tindivanam station by road is **Gingee** (*Chenji*), the most famous fort in the Carnatic. (Motor-bus service, R.H., food to be taken.) The fortress comprises three strongly-fortified hills connected by walls 3 m. in perimeter, with seven gates. The highest and most important hill, Rajagiri, about 500 ft. high, consists of a ridge terminating in an overhanging bluff, facing the S., and falling with a precipitous sweep to the plain on the N. On the summit of this bluff stands the citadel. On the S.W., where the crest of the ridge meets the base of the bluff, across a narrow and steep ravine, three walls, each about 20 ft. or 25 ft.

[1] See note on p 648.

high, rise one behind the other. On the N. side the Fort is defended by a narrow chasm, artificially prolonged and deepened, a wooden bridge over it being the only means of ingress into the citadel through a narrow stone gateway facing the bridge.

Of the ruined buildings inside the most remarkable are the two pagodas and the Kaliyana Mahal, a square court surrounded by rooms for the ladies of the Governor's household In the middle is a square tower of eight storeys, with a pyramidal roof

Other objects of interest are—the great gun on the top of Rajagiri, which has the figures 7560 stamped on it; the Raja's bathing-stone, a large smooth slab of granite; and the *Prisoners' Well*, a very singular boulder about 15 ft to 20 ft. high, with a natural hollow passing through it, poised on a rock near the Chakrakulam, and surmounted by a low, circular, brick wall

Gingee was a stronghold of the Vijayanagar power, built 1442. In 1638 it fell to Bijapur In 1677 Sivaji took it by stratagem, and it remained in Mahratta hands for twenty-one years In 1690 the armies of the Delhi Emperor, under Zulfikar Khan, were despatched against Raja Ram, son of Sivaji, at Gingee the Fort fell in 1698, and became the headquarters of the standing army in Arcot. In 1750 the French under d'Auteuil and M. Bussy, captured it by night and held it for eleven years, surrendering after another night attack, in 1762

99 m **Villupuram** junction (R., D.B.). Sleeping room at station; ticket to be purchased at the Booking-office; for rules see S.I. Ry. Time-table. There are locomotive workshops here.

Branch lines N.W. to Katpadi (p. 531), passing through Tiruvannamalai (which stood in the way of Hyder's invasions) on the Penner river, and E. to Pondicherry and Cuddalore (p. 648).

A chord from Villupuram S. to (33 m.) Vriddhachalam jn. and (110 m) Trichinopoly jn. (p. 656). On this line (opened 1927-9), 7 m. from Villupuram, is the Ponniar River (bridge, 1824 ft. long).

From Vriddhachalam (R.) branch lines run E to (38 m) Cuddalore, and W to (87 m) Salem (p 628)

46 m the Vellar River (bridge 1367 ft).

102 m the Coleroon River, near Srirangam, with a bridge 2933 ft long

104 m the Cauvery River (bridge 1955 ft)

Pondicherry Branch

16 m E from Villupuram the Gingee River is crossed by a bridge 1104 ft long (1881), and the Pondicherry ry terminates at 24 m from Villupuram. 104 m. by road from Madras is **Pondicherry** (Puducheri) station, capital of the French in India.[1] British Consulate-General in the Rue St Louis Pondicherry is a free port, but a British Customs cordon is drawn round the territory, and persons leaving by road are subject to a Customs examination. The *pousse-pousse*, like a bath-chair, pushed by one or two men, has been replaced by rickshaws

[1] See *History of the French in India*, by G B Malleson (Grant, Edinburgh, 1893).

The town, founded 1674 by François Martin, is divided by a canal into White (La Ville Blanche, next the sea) and Black Towns. The main streets run N. and S. from the *Place Dupleix*, parallel to the sea. The public garden, in which a statue of Joan of Arc has been placed, was presented to the town by the late M. François Gaudart. The Rodier spinning and weaving mills are under English direction; and there is a large trade in ground nuts.

Pondicherry can hardly be described as a "live" town. The grass grows in the streets of the Ville Blanche, and the two hotels, in spite of their names, are indifferent. The Hôtel de l'Europe occupies the mansion of Camille Guerre, once a famous local *avocat*. The *Government House*, a handsome building, is situated at the N. side of the *Place* within 300 yds. of the sea. The church, built 1855, of *Notre Dame des Anges*, has two square towers. The tomb of Bussy, whom Orme described as "the only man of distinction who served under Dupleix," is in the cemetery (apply to the curé) opposite the church, he died at Pondicherry in 1785, aged 67, when holding the office of Governor.

At the entrance to the *Pier*, in a semicircle, are eight pillars, 38 ft. high, of a greyish-blue stone, brought from Gingee (p. 644), which is 40 m. distant, said to have been given to M. Dupleix by the Governor of that place. On the third pillar on the left side, looking towards the sea, is an astronomical plan by some savants who were charged with fixing the longitude of Pondicherry. 50 yds. W. of the pier is the *Statue of Dupleix* (Governor 1741-54), on a pedestal formed of old fragments of temples brought from Gingee. In the *Public Library* are some valuable records. At the S. end of the promenade is the *Hôtel de Ville*. There is also a *Lighthouse*, with a light 89 ft. above the sea. European cemeteries south of the railway station are worth a visit. The town of Pondicherry is lit by electricity.

In 1672 Pondicherry, then a small village, was purchased by the French from the King of Bijapur. In 1693 the Dutch took Pondicherry, but restored it in 1697 at the Peace of Ryswick. Under Dupleix it increased wonderfully. On the 26th of August 1748 Admiral Boscawen laid siege to it with an army of 6000 men, but was compelled to raise the siege on the 6th of October, with the loss of 1065 Europeans. The French garrison consisted of 1800 Europeans and 2000 sepoys.

On the 29th of April 1758 Lally landed with his own regiment and that of Lorraine and commenced a war, which ended ruinously for the French. In the beginning of July 1760 Colonel Coote, with 2000 Europeans and 6000 Indians, began to blockade Pondicherry. On the 2nd of September the British army carried the bound-hedge of cactus and two of four redoubts which defended it. On the 27th November M. Lally expelled all the Indian inhabitants from the town—1400 in number. These, being driven back, attempted to re-enter the fort, but were fired on by the French. For eight days these persons wandered between the lines. At last, finding Lally inexorable, the British suffered them to pass. Hopes of deliverance in the minds of the French were dispelled by the arrival of fresh British men-of-war from Ceylon and Madras.

On 16th January 1761, the town surrendered, as the garrison was reduced to 1100 men of the line fit for duty, and these enfeebled and with but two days' provisions.

In 1765 Pondicherry was restored by the Treaty of Paris of 1763. On 9th August 1778 Sir Hector Munro, with an army of 10,500 men, of whom 1500 were Europeans, again laid siege to it. On the 10th Sir E Vernon, with four ships, fought an indecisive battle in the roads with five French ships under M Tronjoly, who some days after sailed off at night, and left the town to its fate. Pondicherry, after an obstinate defence, was surrendered in the middle of October by M Bellecombe, the Governor, and shortly after the fortifications were destroyed In 1783 it was retransferred to the French, and on the 23rd of August 1793 retaken by the British

The Treaty of Amiens, 1802, restored it to its original masters, whereupon Napoleon sent thither General de Caen, with seven other generals and 1400 regulars. He found the British still in possession and sailed at once for Mauritius The place was then included in S Arcot (Cuddalore) When restored to the French in 1817 the population was only 25,000

The place declared for de Gaulle and the Free French in 1940, so that occupation was unnecessary

French India -- The French possessions in India are composed of the five establishments of Pondicherry* and Karikal on the Coromandel coast, Chandernagore in Bengal, Yanaon on the Orissa coast, and Mahé on the Malabar coast, besides some small settlements known by the name of *loges*, of which the principal are at Surat, Patna, Kasimbazar, Dacca, Balasore, Masulipatam, and Calicut.

The population (1941) is distributed as follows :—

	Area.	Persons.
Pondicherry	113 sq m.	204,653
Karikal	43 ,,	66,555
Chandernagore	3 ,,	38,284
Yanaon	5 ,,	5,711
Mahé	26 ,,	14,092
	Total	329,295

having increased by 31,000 since 1936

Chandernagore is a Free City (1947).

At the head of the Administration there is a Governor, residing at Pondicherry, assisted by a Privy Council, over which he presides, and in which seats are assigned to the Procureur Général and the Financial Secretary of the Colony, and two civil members, named every two years by decree of the President of the Republic. Administrators represent the Governor in the smaller possessions By treaty engagement the French troops are limited, and no military works are erected. The High Court of Appeal is at Pondicherry; and there are courts of first instance at Pondicherry, Karikal, and Chandernagore, and a Justice of the Peace at each of the five establishments. The Departments of medical aid and public instruction are paid almost entirely from the local budget. In addition to the Colonial College at Pondicherry there are Government primary schools and colleges.

The chief exports are oilseeds, ground nuts (a basis for *Chocolat Menier*) and cotton cloth (to the French colonies).

The colony enjoys all the political advantages of the metropolis, and is represented in the French Assembly. The form of local government comprises in detail—

(1) A *conseil général*, consisting of twenty-eight members, responsible for the local budget and every fiscal tax credited to this budget.

(2) A *conseil local* for each establishment, responsible for attending to its various requirements.

(3) Seventeen municipal councils, representing the interests of the communes These 17 communes of the 5 establishments are distributed as follows: Pondicherry, 8 communes; Karikal, 6; Chandernagore, 1; Yanaon, 1, Mahé, 1.

All these councils are constituted by two groups of separate electors: (*a*) Europeans, descendants of Europeans, and similar persons, (*b*) the French Indians Each group has the right, in principle, to half the seats of the elected body The representative Deputy is elected by the whole electoral body of the two groups together; the representative Senator is elected by the members of the elected councils together.

Former Main Line

107 m. from Madras the Ponnar River bridge is 1828 ft. long (1878).

126 m. the Gadilam River is crossed by a bridge 1612 ft long (1890).

126 m is **Cuddalore** New Town station (D B). The "Garden-house" (1732-3) is the only Collector's residence in the Madras Presidency which was officially recognised as entitled to fly the Union Jack.

128 m. **Cuddalore** (Old Town) junction for a line W. to Vriddichellam junction (R.) and Salem.

From New Town station Fort St David can most conveniently be visited; it is also nearest to the D.B. At the Old Town station are the residences of Europeans, also the Church, which is interesting on account of the old tombs, including that of Commodore Barnet (d 1746).

Fort St David, 1½ m from New Town, is interesting on account of its history. From 1690, after purchase from the Mahratta, Sambhaji, son of Sivaji, by the East India Company, it remained in the hands of the British until 1758 (Clive being Deputy Governor in 1756), when it was taken by Lally and destroyed, after many attempts from 1747 onwards, and restored by the Peace of 1783.[1] All that now remains of the fort are the ditch, the foundations of the ramparts, and some masses of the fallen walls

145 m **Porto Novo** station The town stands on the N bank of the River Vellar, close to the sea, and is called by the Indians Mahmud Bandar and Farangipettai The Portuguese settled here about 1575, being the first Europeans who landed on the Coromandel coast. In 1678 the Dutch abandoned their factory and went to Pulicat (p. 511) In 1690 the English began trading Iron ore from Salem was smelted, 1833-8

Within 3 m to the N, close to the seashore, was fought a very important Indian battle. Sir Eyre Coote[2] had arrived at

[1] That Bernadotte, afterwards Marshal of France and King of Sweden, was captured in a sortie during the siege of 1783, is discredited.

[2] Sir Eyre Coote was with the 39th Foot at Plassey; won the great victory of Wandiwash on 22nd January 1760; took Pondicherry on 16th January 1761; was made K.C.B. in 1771, was Commander-in-Chief in Bengal, 1779; defeated Hyder at Arni (74 m. S W. of Madras) on 2nd June 1782, and was sent again in 1783 to check Hyder Ali, but died at Madras, worn out by his campaigns, on 27th April 1783

Porto Novo on the 19th of June 1781, after having been repelled the day before in an attack on the fortified pagoda of Chidambaram.

Hyder 'Ali marched from the W., took up and fortified an advantageous position on the only road by which the British could advance to Cuddalore. The British force consisted of 2000 Europeans, 6000 sepoys and 41 guns, Hyder 'Ali's forces of 40,000 Indians (some French-trained) and 100 guns. Sir J. Malcolm said "If a moment was to be named when the existence of the British power depended upon its native troops, we should fix upon the Battle of Porto Novo Driven to the seashore, attacked by an enemy exulting in recent success, confident in his numbers, and strong in the terror of his name, every circumstance combined that could dishearten the small body of men on whom the fate of the war depended. Not a heart shrank from the trial" The victory was won on 1st July 1781 Coote especially praised the steadiness of the 73rd Highlanders and presented them with a sum of money to purchase a pipe of silver in honour of the day

151 m **Chidambaram** (Chillumbrum) station, a capital of the Cholas (907-1310), on the Coleroon river

The *Temples* at Chidambaram are the oldest in the S of India, and portions of them are gems of Dravidian art The principal temple is sacred to Siva, and is affirmed to have been erected, or at least embellished, by Hiranya Varna Chakravarti, the "golden-coloured Emperor," said to have originally borne the name of Swetavarma, the "white-coloured," on account of his leprosy, and to have come S. on a pilgrimage from Kashmir (*c.* 500 A.D.). He miraculously recovered at Chidambaram after taking a bath in the tank in the centre of the temple, and thereupon rebuilt or enlarged the temples. He is said to have brought 3000 Brahmans from the N.

By tradition, Vira Chola Raja (927-77 A.D.) saw the Sabhapati (Siva) dancing on the seashore with his wife, Parvati, and erected the Kanak Sabha, or golden shrine, in memory of the god, who is here called *Natesa* or *Nateswar*, "God of Dancing."

The whole area, thirty-two acres, is surrounded by two high walls The outer wall of all is 1800 ft long on the E and 1480 ft. from E to W Coote wore out a brass 18-pounder gun trying to breach the walls. E. of the temple is a tank, 315 ft by 180 ft. At the four points of the compass are four vast gopurams, those on the N and S being about 160 ft. high.

S. of the tank is the Hall of 1000 Pillars, which is 340 ft. long and 190 ft. broad Fergusson (*Hist. of Ind Arch.*, I, 377) makes the number of pillars in the hall 984, a rare instance in S. India where the number approaches 1000

The *Temple of Parvati* (N.E.) or Sivakami Amman (14th century), the wife of Siva, is remarkable for its porch The roof is supported by bracketing shafts tied with transverse purlins till a space of only 9 ft. is left to be spanned. The partly projecting enclosure is elaborate, with two storeys of pillars

Adjoining this Temple of Parvati is one to *Subrahmanya*, the enclosure of which is 250 ft. by 305 ft. The images of a peacock and two elephants stand before it, then a portico with four pillars in front, with an inner court. Fergusson assigned 1700 A.D. as the date. Another small one to

Subrahmanya, and one to Ganesh (the effigy is said to be the largest in India), are in the corner of the great enclosure. There are several small *mandapams* in other parts of the great enclosure, and one to the S. of the court of Parvati's Temple.

The enclosure of this principal temple is W of the tank In the S W corner of this enclosure is a temple to Parvati, and in the centre of the S side an idol of Nateswar. The sanctuary consists of two parts. In this is the most sacred image of the dancing Siva, which is that of a naked giant with four arms, his right leg planted on the ground and his left lifted sideways. The roof of this building is covered with plates of gilt copper.

There is also a tiny shrine, of which Fergusson wrote "The oldest thing now existing here . A porch of fifty-six pillars about 8 ft. high, and most delicately carved, resting on a stylobate, ornamented with dancing figures, more graceful and more elegantly executed than any others of their class, so far as I know, in S India At the sides are wheels and horses, the whole being intended to represent a car . ." This pagoda was surrendered to the British in 1760 without a shot, but in 1781 Hyder 'Ali garrisoned it with 3000 men, and Sir Eyre Coote was repelled.

At Anamalainagar is the University, named after its founder, Sir Anamalai Chettia The library is well worth a visit

158 m. The Coleroon River bridge is 2217 ft. long (1879) Devikotta is at the mouth

174 m. from Madras is **Mayavaram** junction (D.B.K.) for Tranquebar (p. 651). The town, 3 m distant, is a place of pilgrimage in November, the Siva Pagoda has one large gopuram and one small one. To the W. of the Great Gopuram is a *Teppa Kulam* **Tank**, in which the god is rowed on a raft

Arantangi Branch

From Mayavaram a line runs S to 10 m Peralam, junction for a short line of 14 m. to the French settlement of **Karikal**, situated on a branch of the Cauvery, 12 m. N. of Negapatam (p 656)

The line then continues to (24 m.) **Tiruvarur** (on the Great Southern Railway of India line from Tanjore to Negapatam), Mutapet (54 m), Pattukottai (71 m), and Arantangi (99 m)

At Tiruturaipundi Jn. (40. m.) there is a branch (29 m.) S E to Point Calimere (Kalimettu, "Hill of the Euphorbia") On the beach at the Point is a column, 90 ft high, which bears an inscription on the S W face, recording its erection by Sarfoji, the Raja of Tanjore, in 1814, in commemoration of "the downfall of Bonaparte", it was used at one time as a lighthouse.

The temple at **Tiruvarur** (Tanjore District) should not be confused with the Vishnu temple of Viraraghava at Tiruvallur (p. 532) Fergusson writes of it (*Ind Arch*, 1, 367 [1]) :—

"The nucleus here was a small village temple. It is a double shrine, dedicated to Valmikeswara, or Siva, and his consort, standing in a cloistered court which measures 191 ft by 156 ft over all, and has one gopuram in front."

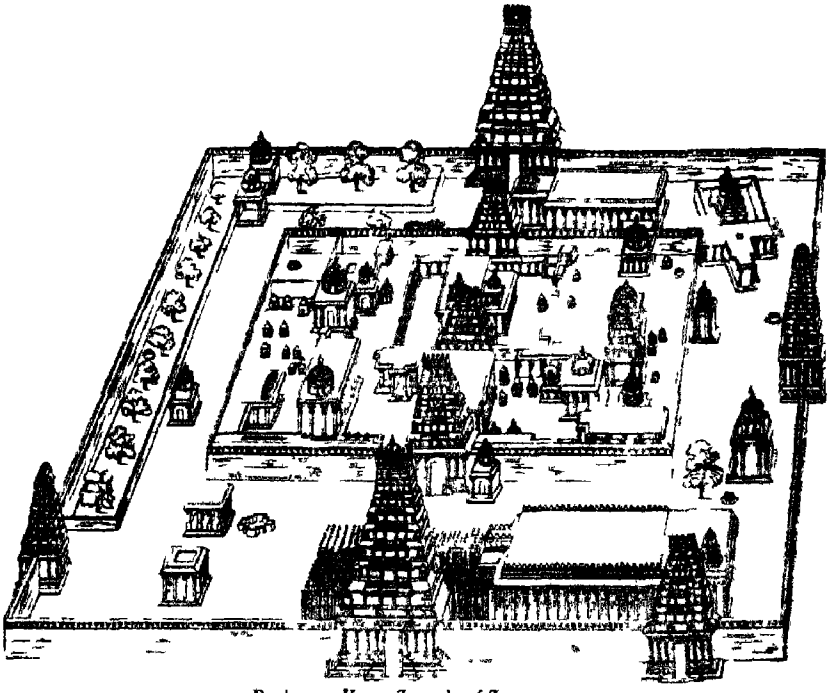
The deity is said to have been made from an ant-hill (Valmika).

" . At some subsequent period a second or outer court was added, measuring 470 ft. each way, with two gopurams, higher than the original one, and containing within its walls numberless little shrines

[1] See also *South Indian Shrines* by P. V. Jagadisa Aiyar, Madras, 1929.

and porches. Additions were again made at some subsequent date, the whole being enclosed in a court 957 ft. by 726 ft., this time with five gopurams, irregular in height and spacing and several important shrines."

One shrine is dedicated to Sri Tyagaraja-Swami who performed



Bird's eye View Temple of Tiruvarur

364 miracles (lilas) here. It was intended to endow the temple with one of those great halls which were considered indispensable in temples of the first class and generally intended to have 1000 columns. This has only 807, and almost one-half of these mere posts, not fitted to carry a roof of any sort.

"The general effect may be gathered from the woodcut. As an artistic design, nothing can be worse." A wooden model of this temple is in the Madras Museum.

Tranquebar Branch

18 m. from Mayavaram Tranquebar (93 sq. m.), was a Danish settlement from 1616 (bought from the Nayakka ruler of Tanjore) to 1845 when it was acquired by the British Government with Serampore. The Tamil name *Tarangambadi* means "the village by the sound of the wave."

The fort, known as the *Dansborg* ("Danish Castle") was built by Ovo Gedde on behalf of the Danish E.I. Company in 1620. It is now a traveller's bungalow (not good). A wooden tablet, bearing a curious monogram of Christian

V. of Denmark, dated 1677, which was formerly fixed in a room in the Dansborg, has been removed to the Museum at Madras.

The first Protestant mission in India was founded at Tranquebar in 1706. There are several very old churches in Tranquebar, and some interesting relics of earlier Christianity survive, including no fewer than five cemeteries, the tombs in which bear inscriptions in nine languages, Armenian, Danish, Dutch, English, French, German, Latin, Portuguese and Swedish.

The road enters by a gateway, bearing the date 1792 and the monogram of the King of Denmark. The principal thoroughfares retain their names of King and Queen Street. On the E. of King Street is the *Lutheran Mission Church* ("New Jerusalem") and opposite is the English Church ("Zion"). The spire of the latter is shaped like a spiked helmet, and the bell is dated 1732; in the vestry is a painting of the Last Supper, coloured in relief upon wood, in the manner of Albrecht Dürer.

Catherine Noël Werlée (1762-1835), the wife of G. F. Grand, a Bengal civilian, whose escapade with Philip Francis cost the latter Rs.50,000, was born here. She subsequently married Talleyrand (1802) and became Princess of Benevento (1806).

The line continues from Mayavaram to

194 m. **Kumbakonam** station (R., D.B.), in the Tanjore District. The pagodas, near the centre of the town, are about 1 m. from the station. The largest pagoda is dedicated to Vishnu, (Sarangapani), and the Great Gopuram here has eleven storeys. The total height is 147 ft. A street arched over leads to the Siva Pagoda, or Temple of Kumbeshwara. A pavilion in front has slender pillars, seemingly inadequate to support the pyramidal roof carved in bands.

To the E. side of the road from the station to the temples is the *Mahamakham Tank*—into which, it is supposed, the Ganges flows once in twelve years, the last occasion was in 1945. So vast a concourse of people enter the water to bathe that the surface rises some inches. The tank has sixteen small pagodas studding its banks.

The *Government College* at Kumbakonam procured for the town the distinction of being called the Cambridge of Southern India. There is a Kashi Math (monastery).

218 m. **TANJORE** junction (R., D.B.). The delta of the Cauvery river, near the head of which Tanjore stands, is considered the garden of Southern India. It carries a dense population, and is highly irrigated.

The Tanjore country was under the Cholas during the whole of their supremacy (907-1310). In 1500, Krishna Raya of Vijiyanagar annexed it. Vyankoji, the brother of Sivaji, moved here from Bangalore (1675), proclaimed himself independent, and established a Mahratta dynasty. The British first came into contact with the place, by an expedition in 1749, and later in the year the Raja had to buy off Chanda Sahib. In 1758 it was attacked by the French Count Lally. A treaty was made with Madras in 1762. Colonel Joseph Smith captured the fort for Muhammad Ali in 1773, and in 1776 it was restored.

Raja Sarfoji, by a treaty in 1779, ceded the dependent territory to the British, retaining only the capital and a small tract. Sarfoji was succeeded in 1832 by

his son Sivaji, who died in 1853 without legitimate male issue, when the State lapsed to the British Government, but a pension is continued. "For ages Tanjore has been one of the chief political, literary, and religious centres of the South."

The *Little Fort* containing the *Great Temple* adjoins the Great Fort, with the Palace of the Raja and Schwartz's Church. On a rampart there is a huge cannon called Raja Gopal, 24 ft in length, 10 ft. in its outer circumference, and 2 ft in its bore, which has only once been fired

The Great Pagoda of Brihadi-Swara.—The entrance from the E is under a gopuram 90 ft high Then leads a passage 170 ft long between two enclosures, desecrated by French occupation in 1777, according to an inscription on the gateway, to a second gopuram of smaller dimensions There is a long inscription in Tamil characters on either side of the passage under the second gopuram From this the outer enclosure of the temple is entered It is 415 ft by 800 ft, and is surrounded by cloister chapels, each containing a large lingam, whereas the sculptures on the gopurams are Vishnuvite. Visitors may walk everywhere in the enclosure, but cannot enter the Great Temple or the halls of approach to it

On the right is the *Yajnasala*, where sacrifices are offered, and the Sabhapati Kovil, or Shrine of Siva, as the presiding god of an assembly There are two *Balipidams*, or altars, close to the E. wall, one inside and one outside; and at about 40 ft from the E. wall is a gigantic *Nandi* (bull) in black granite, a monolith 12 ft 10 in. high and 16 ft long, sculptured out of a solid block of rock, said to have been brought a distance of 400 m. It is daily anointed with oil, which makes it shine like the finest bronze.

W. again is the *Vimana*, or Temple, the most beautiful and effective of all Dravidian temples. A portico supported by three rows of pillars leads to two halls 75 ft by 70 ft. each; beyond these is the shrine, 56 ft. by 54 ft., over which rises the vast tower of the *vimana*, 216 ft high, including the great monolithic dome-shaped top and the *Stupi*, or ornament

N E of the Great Tower is the Chandikasan Kovil, or shrine of the god who reports to the chief god the arrival of worshippers. W of this, at the N.W. corner of the outer enclosure, is the *Subrahmanya Kovil*, Shrine of Kartikkeya, the son of Siva and deity of war, who is called Subrahmanya (from *su*, good, *brahman*, a Brahman) because he is the especial protector of Brahmans Fergusson wrote that it "is as exquisite a piece of decorative architecture as is to be found in the S. of India" (*Ind Arch*, 1, 365) It consists of a tower 55 ft high, raised on a base 45 ft. sq., adorned with pillars and pilasters, which ornament is continued along a corridor 50 ft long, communicating with a second building 50 ft. sq to the E. It is probably of the 16th or 17th century Its carving seems to be in imitation of wood.

In the *mandapam* (48 ft by 45 ft) a museum was opened in 1935, on the birthday of Raja Raja Chola the Great (985-1014), the founder of the temple. It contains objects of the Chola and Nayak periods and some paintings of the Maratha Rajas. The temple jewels are displayed on great occasions The library contains 20,000 Sanskrit manuscripts

The base of the grand temple—*i.e.*, the *vimana* and halls leading to it—is covered with Tamil inscriptions, which would give the date as approximately 1009 A.D.

The pyramidal tower over the shrine has evidently often been repaired in its upper part, where the images are now only of cement. This tower is only 38 ft. lower than the Kutb Minar at Delhi.

Dr Burnell says in *The Great Temple of Tanjore*[1], "This style arose under the Chola Kings in the 11th century A.D., when nearly all the great temples to Siva in S India were built, and it continued in use in the 12th and 13th centuries, during which the great temples to Vishnu were erected Up to the beginning of the 16th century these temples remained almost unchanged, but at that time all S India became subject to the Kings of Vijayanagar, and one of these, named Krishnaraya (1509-30), rebuilt or added to most of the great temples of the S. The chief feature of the architecture of this later period is the construction of enormous gopurams so built by Krishnaraya, they do not form part of the original style, but were intended as fortifications to protect the shrines from foreign invaders, and certain plunder and desecration, as the Hindus first discovered on the Muhammadan invasion of 1310 A.D."

Vijaya Rajendra Chola (1054-1060) made grants for the annual performance of a play in April-May The text was forgotten and Raja Sarfoji instituted a ceremonial dance (Kuruvanchik-Kottu) performed at this season

The Palace.—This building is in the Great Fort, lying E of the Little Fort. Some portions of it are occupied by the representatives of the Palace family, and the remainder is used for Government offices. It is a vast building of masonry, and stands on the left of the street, which runs Northward through the fort; it was built partly by the Nayakkas about 1550 A.D., partly by the Mahrattas. After passing through two quadrangles a third is entered, on the S. side of which is a building like a gopuram, 190 ft. high, with eight storeys It was once an armoury

E of the quadrangle is the *Telugu Darbar-room* of the Nayakkar Kings On the sides of a platform of black granite are sculptured in alto-relievo Surs and Asurs fighting On this platform stands a white marble statue, by Flaxman,[1] of Sarfoji, pupil of Schwartz He is standing with the palms of his hands joined as if in prayer, and he wears the curious triangular pointed cap used by the Tanjore Princes in the last half-century of their rule

The picture-gallery has been dispersed A portrait of Lord Pigot has been removed to the Banqueting Hall at Madras (p 606), and the portraits of the Rajas of Tanjore have been purchased by the Palace family, who have also acquired a fine bust of Nelson, presented to Raja Sarfoji by the Hon Anne Seymour Damer, whose work it was.

On the opposite side of the quadrangle is the *Library*, in which is a remarkable collection of more than 18,000 MSS. in Sanskrit, Tamil and other Indian languages, and also a large collection of printed books This library (which has been converted into a public trust) dates from about 1700. In the *Mahratta Darbar*, in another quadrangle, is a large picture of Sivaji, the last Raja of Tanjore, with his chief secretary and his Diwan.

[1] See a book with the same title by J. M. Somasundram Pillai.

[1] The Tanjore *Gazetteer* of 1906 states that this marble statue is by Chantrey and not by Flaxman. There is no inscription upon it

E. again lies *Schwartz's Church*, close to the Sivaganga Tank. Over the gate is the date 1777, and over the façade of the church is 1779 A.D. In the centre, opposite the communion table, is a group of figures in white marble, by Flaxman, representing the death of Schwartz in 1798. The aged missionary is extended on his bed, and on his left stands the Raja Sarfoji, his pupil, with two attendants, while on his right is the missionary Kohlmer, and near the bottom of the bed are four boys The inscription contains a summary of his career The small house N.W. of the church, and close to it, is said to have been Schwartz's habitation Lord Valentia (1804) and Bishop Heber (1826) have left flattering accounts of Sarfoji He was brought up among Christians but never abandoned the Hindu faith

Next to the Sivaganga Tank is the *People's Park* Other buildings are the Sangita Mahal, a miniature of the surviving Court of Tirumala Nayak's Palace in Madura; the Arsenal or Armoury; and the Clock-tower, so called on account of a curious device for marking the time, now removed.

The Tanjore District was the scene of the earliest labours of Protestant missionaries in India. In 1706 the German missionaries Ziegenbalg and Plütschan established a Lutheran mission in the Danish settlement of Tranquebar, under the patronage of King Frederick IV of Denmark, and in 1841 their establishments were taken over by the Leipzig Evangelical Lutheran Mission, which subsequently extended its operations into the District. The mission at Tanjore was founded in 1778 by the Rev. C. F. Schwartz, of the Tranquebar Mission, who some time previously had transferred his services to the Society for Promoting Christian Knowledge. The mission establishments at Tanjore were taken over in 1826 by the Society for the Propagation of the Gospel.

Roman Catholic missions in Tanjore date from the first half of the 17th century. Their principal seats are Negapatam, Velanganni (on the coast, 6 m. S. of Negapatam), Tanjore, Vallam, and Kumbakonam.

In St Peter's cemetery is the grave of the tenth Lord Hastings, who died in 1875 of fever contracted while tiger-shooting with King Edward, then Prince of Wales

Tanjore is famous for its silk, carpets, jewellery repoussé work, copper ware, and models in pith. The repoussé work, and the copper work are inlaid with brass and silver *swámi* (or god) figures

Vallam, 7 m. S.W. of Tanjore, is the hdqrs of the Collector of the District. The Fort was taken by the British in 1771 There are two tombs of British officers in the cemetery relating to this period

Motor-bus service (36 m.) from Tanjore to **Pudukkottai**, capital of the State of that name, with some fine public buildings and a collection of pictures in the palace. (Access by rail also from Trichinopoly, p 656) The area of the State is 1179 sq m. The ruling family, known as the Tondiman Rajas, founded by Raghunatha Raya Tondiman in 1686, have played a leading part in S Indian history, old allies of the British in wars with the French, Hyder 'Ali, Tipu Sultan, and the Poligars. The late Raja spent his last years and died in Europe in May 1928. H.H. Sri Brahadamba Das Raja Rajagopala Tondaiman succeeded him.

A branch, formerly the Great Southern Ry, opened 1861, runs from Tanjore, 48 m. E., *viâ* Tiruvarur junction (p. 650) to

Negapatam, or Nagai (R., D B), an old port doing a brisk trade with the Straits Settlements and Coast Ports. According to Colonel Yule, it is the "Malefattan" of Arab geographers It was one of the earliest settlements of the Portuguese, was taken by the Dutch in 1660 and by the British in 1781. The Dutch Church and the old graves in the Karicop cemetery are interesting Colonel Francis Swain Ward (1794), who presented a number of his paintings of Indian scenery to the E India Company (now at the India Office), is buried here Steamers belonging to the B I S N Company run once a fortnight to the Straits and occasionally to Coast ports.

The branch runs on to 53 m **Nagore**. A centre of Muslim S. India. Interesting 16th-century mosque, enclosing the tomb of a Muslim saint. the inner doors are plated with silver, a somewhat unusual adornment, which recalls a Hindu temple rather than an orthodox Muslim place of worship Nagore was received by the Dutch from the Tanjore Raja

Main Line

249 m. from Madras, **Trichinopoly** junction (R) * (D.B; Railway Hotel, pop. 159,566, alt. 256 ft) Hdqrs. of the S I Railway. The name is properly Tirusirapalli, or the "City of the Three-headed Demon" The famous **Rock** dominates the landscape for some miles before reaching the station A broad-gauge railway runs (88 m. W.) to Erode (p. 629), the junction for the line from Madras to the West Coast (Route 35). A chord line, opened 1930, runs through Pudukkottai (p. 655) to Manamadurai on the main line, avoiding Madura (p. 661) but shortening the Indo-Ceylon route to Dhanushkodi by 72½ m.

St John's Church, in which Bishop Reginald Heber is buried, is close to the station; the grave in the chancel is marked by a fine brass. The bath in which he accidentally met with his death in 1826 is near the house and court of the Judge of Trichinopoly. There is a marble slab monument on the spot Near the same spot is a monument erected in memory of Mr H. O. D Harding, I C S, District and Sessions Judge, who was murdered by a fanatic as he descended from his carriage to enter the Court on 22nd February 1916.

Two historic masses of granite, the Golden Rock and the Fakir's Rock, are in the plain to the S. Near the Golden Rock the French were defeated in two engagements in the second siege of 1753, which followed on the demand of the Mysore General that the town should be made over to him Golden coins were found here, but a syndicate endeavoured without success to discover further buried treasure There are Boys' and Girls' Schools and a Convent. Near the Gymkhana is the Cathedral House of the Roman Catholic Bishop of Trichinopoly There is also a tomb of Nathar (or Nadir) Shah, a saint (969-1039).

S. of the Jn Stn. are the Race-course and aerodrome.

3 m. S.W. of Trichinopoly is a fortified pagoda which was occupied by the French in 1753, and recaptured by the British under Colonel Stringer Lawrence

Trichinopoly Fort station is 3 m on the broad-gauge *Erode Branch*.

The Fort has been dismantled, but this part of the town is still known as "the fort."

The English candidate for the Nawabship of Arcot, Muhammad 'Ali was beleaguered by Chanda Sahib and the French. During the siege (1753-4), in November 1753, the French made a night attack on the Fort, and succeeded in entering the outer line of fortifications at *Dalton's Battery* at the N.W angle Here there was a pit 30 ft. deep, into which many of the assailants fell Their screams alarmed the garrison, who repelled them, and made 360 of the French prisoners This portion of the old Fort is all that has been left standing. The moat that surrounded it has been filled in and planted as a boulevard.

On the N. side of the town is the **Rock**, 236 ft high. An early morning visit is advisable At the foot of the W. side is a handsome *Teppa Kulam* or sacred tank, with stone steps and a *mandapam*, or pavilion, in the centre E of the tank is a house, which bears a medallion with an inscription stating that Robert (afterwards Lord) Clive occupied it *circa* 1752. There is, however, little evidence to corroborate the legend

The most striking buildings are St Joseph's College and the S.P.G. College (now named Bishop Heber's College). The former is situated in the N W corner of the Fort, near the Main Guard Gate It was founded by the Jesuit Mission in 1844 at Negapatam, and was transferred to Trichinopoly in 1883, when Father Sewell, who embraced the R.C. faith after his retirement from the army in 1877 with the rank of Major, became the Manager of the College. He was on the Syndicate of Madras University and received the Kaiser-i-Hind Gold Medal. He died in Madras in 1915, aged 78, and was buried in the College Chapel. St Joseph's College is a leading College of the Madras Presidency. It has an imposing array of buildings, including the College Church and the Lawley Hall

Bishop Heber's College was developed from schools founded by the Rev C. F Schwartz of the S P C K It is situated E of the Main Guard Gate, and just opposite the Teppa Kulam In 1762 Schwartz visited Trichinopoly and founded the first English Church in 1765-6 This is called Christ Church, and stands opposite to the Caldwell Hostel on the way to Sri Rangam Schwartz remained for many years in Trichinopoly and died in Tanjore in 1798, aged 72. An interesting tomb in Christ Church cemetery is that of Mrs Rebecca Darke (1797), whose grand-daughter, Julia Floyd, married Sir Robert Peel, the Prime Minister.

The National College, close by is a Hindu College, the creation of the Nattukottai Chettis.

The ascent of the Rock is by a covered passage from the S.; on the sides are stone elephants and pillars about 18 ft high, which bear the stamp of Jain architecture. The pillars have carved capitals representing the lion of the S. and various figures of men and women The frieze above is ornamented with carvings of animals. Flights of very steep steps, 290 in number, coloured white with red stripes, lead through this passage to the vestibule of a Saiva temple on the left, whence on certain days the images of the gods—viz., of Siva, Parvati, Ganesh, and Subrahmanya or Skanda—are carried in procession. In front of the temple

is a huge Nandi (bull) covered with silver plates. The temple and the original Fort were built by a Madura Nayakka in 1660-70. The cave temples, cut into the rock on the left side of the steps, are worth visiting. The pillars in these temples bear archaic inscriptions in Pallava characters. Half-way up, the stairs emerge into the open at a small shrine dedicated to Ganesh (here called Pillayar, "the Son"). It is lighted up every evening by three lamps. The steps of the ascent were the scene of a terrible disaster on 1849, when in a panic 500 people were killed.

From the temple the stairs turn E and lead out on to the surface of the Rock, up which a rough approach has been cut to the *mandapam*, or pavilion, crowning the top, from which there is one of the finest panoramic views to be seen in the plains of India. On all sides the eye traverses the plain for 20 m. or 30 m. The height of the Rock is only 236 ft., but the plain is so flat that this height is sufficient.

On the S. is the *Golden Rock*, about 100 ft. high. S.E. of this, a patch of low, rocky ground is seen about 40 ft. high. This is *French Rocks*, about 2 m. from the fort. Within the town, distant only a few hundred yards, is the *Nawab's Palace*, which has been restored by Government, and is used for courts and public offices.

N. of the Fort Rock is the broad shallow bed of the Cauvery, in which, except in the rains, there is but a narrow streak of water. Beyond is the *Island of Sri Rangam*, with the two great temples, that of *Sri Rangam* to the W., and that of Jambukeswar to the E. Beyond to the N. in the far distance rises a long line of hills. To the N.W. is the Tale Malai range, the greatest height of which is 1800 ft.; while due N. of the Fort Rock are the Kale Malai (Kollimalai) Hills, which attain 4000 ft.; and E. of these are the Pachai Malais (Green Hills), which in some parts rise to 2300 ft.

The old Cantonment of Warriore (Uraiyur), on the site of a Chola capital, lies to the W. of the city. It consists of a square fringed by European bungalows, and is used as the headquarters of the South Indian Railway, whose locomotive carriage and wagon works are near Golden Rock. A custom prevails in Trichinopoly whereby the *Kavalgaran*, or watchman, whom every householder employs, is taken from the thief caste.[1]

The most important local *Industries* are weaving and tobacco and cigar making, but the best Trichinopoly cheroots come for the most part from Dindigal. The local gold and silver smiths are very successful in their filigree work.

About 2 m. N. from the Rock, on an island, 17 m. long and 1½ m. broad, formed by a bifurcation of the River Cauvery, is the town of *Sri Rangam*, with its Vaishnavite temples, a place of Hindu pilgrimage to be ranked with Benares and Rameswaram. A bridge of thirty-two arches joins the mainland to the island on the S. An inscription on a slab let into the parapet commemorates the defence of Trichinopoly by Stringer Lawrence and the two actions fought by him on 26th June and 21st September 1753, "which mainly contributed to lay the foundations of the British Empire in India."

The Great Temple of Raghunathaswami at Sri Rangam, built by the Nayakkas of Madura, is 1 m.

[1] J. C. Molony, *A Book of South India* (Methuen, 1926, p. 38).

N.W. of the bridge. The entrance is by a grand S. gateway, 48 ft. high, which appears to have been built as the base of a great gopuram. The sides of the passage are lined with pilasters and ornamented. The passage is about 100 ft long, and the inner height, exclusive of the roof, is 43 ft Vast monoliths have been used as uprights in the construction, some of them over 40 ft. high. The stones on the roof, laid horizontally, are also huge. The stone on the inside of the arch is 29 ft. 7 in. long, 4 ft 5 in. broad, and about 8 ft. thick

From the terrace at the top of the gateway is seen the vast outer wall which encloses the gardens as well as the buildings. The temple is composed of seven rectangular enclosures, the outermost, which measures 2475 ft. by 2880 ft, contains a bazar. Within this is a second wall 20 ft high, enclosing the dwellings of the Brahmans in the service of the temple The buildings diminish from the exterior to the innermost enclosure "If its principle of design could be reversed, it would be one of the finest temples in the S of India.' [1] Others take the opposite view There are two great gopurams on the E. side, two smaller on the W, and three of a medium height on the S

Beyond the still incomplete gopuram the road passes under a small *mandapam*, and then through a gopuram about 60 ft high The decoration of the gopurams is all painted, and the ceiling of this one represents the Varaha, or Boar Incarnation, of Vishnu, as well as other Avataras with multitudes of human beings adoring them A second *mandapam* is then passed and a second and third gopuram.

Another enclosing wall surrounds the more sacred part, or real temple, beyond which is the vimana, or adytum, which none but high-caste Hindus are allowed to enter At a third *mandapam* the jewels of the temple may be examined

In the court round the central enclosure is the so-called *Hall of 1000 Pillars* The actual number is about 940, granite monoliths 18 ft high, with pediments, slightly carved to the height of 3 ft, and they all have the plantain bracket at the top. The pillars of the front row looking N represent men on rearing horses spearing tigers, the horses' feet being supported by the shields of men on foot beside them The carved horses spring out from the pillars, all being carved from one block The great gopuram on the N is 152 ft. high. In the floor of the passage under this gopuram leading to the Coleroon river is a stone with a Kanarese inscription Fergusson was of opinion that the buildings were under construction from the 10th century to 1600 A D.[1]

Temple of Jambukeswar. — In the S of India temples are often found in pairs If there is one dedicated to Vishnu, there will be one dedicated to Siva So here, at about 1¼ m E of the Great Temple of Sri Rangam, is a smaller one sacred to Jambukeswar, or Siva, from *jambuka*, "rose-apple," and *iswar*, "lord," or Lord of India, Jambu being a division of the world = "India"

The Jambukeswar Temple has been restored It has three courts, and is very much smaller than Sri Rangam The plan of the building is more artistic, and the main corridor and proportions are fine On the right of the entrance is an upright stone 4 ft. high, with a long Tamil inscrip-

[1] See 1, 368 of Fergusson's *Ind Arch*, where an illustration and a description of the temples will be found

[1] *Ind Arch*, 1, 373

tion. The first gopuram is also the gateway of entrance. The ceiling is painted with flowers of the lotus. Within the inner court is a remarkable *Tappa Kulam*, or tank, fed by spring water, with a pavilion in the centre. Round the S., the E., and the N. sides run corridors of two storeys supported by pillars. Beyond this is a second gopuram, and a third which forms part of the wall enclosing the shrine. Thence a broad corridor leads to the *vimana*. This temple is perhaps older than that of Sri Rangam.

The **Anikuts**, or dams.—About 9 m. to the W. of Trichinopoly the Cauvery separates into two branches, which enclose the island, the N. branch being called the *Coleroon* or *Kolidun*, and the S. the Cauvery. A dam was constructed across the Coleroon in 1836 to prevent the river deserting the S. arm, from which a number of branches irrigate Tanjore, the chief one being called the Vennar, which falls into the sea 20 m. S. of the mouth of the Coleroon.

This anikut, designed by Sir Arthur Cotton, R.E., but since altered, consists of three parts, being broken by two islands. It is a brick wall 7 ft. high and 6 ft. thick, capped with stone, and is founded on two rows of wells. It is defended by an apron of cut stone from 21 ft. to 40 ft. broad, and has twenty-four sluices, which help to scour the bed.

About 9 m. E. of Trichinopoly is the Grand Anikut, an ancient work dating perhaps from A.D. 150, and below that is the Lower Anikut, also built in 1836, joining the tail of Srirangam island to the bank.

An interesting irrigation feature is the *Korambu* system. Above the anikuts channels take off flush with the river. They get a supply while the river is full. When the river goes down, *Korambus* are built—*i.e.*, temporary dams of brushwood, piles, earth, etc.—to catch up some water and divert it into the channels. If a freshet comes they are swept away and have to be put up again. They are accommodated to the needs of the moment.

307 m. from Madras (Egmore), **Dindigal** jn. (R., alt. 943 ft.). It had well-known tobacco factories, tanneries, and a large cotton factory.

The great rock on which the fort is built forms a conspicuous object; its summit is 1223 ft. above sea-level, 280 ft. above the plain. Its inaccessible sides were strongly fortified under the first Nayakka Kings of Madura, and for a long time it was the W. key of the Province of Madura. It was taken by Mysore in 1745.

Hyder 'Ali was appointed governor in 1755, and used it as a base for the invasion of Madura, disposing of his prisoners by throwing them from the top of the rock. The place was taken by the British from Tipu Sultan in 1781, restored to him in 1784, retaken in 1790, and finally ceded in 1792 by the Treaty of Seringapatam.

The Dindigal Kottayam road passes close to the Periyar Lake (p. 638).

Dindigal to Podanur

A branch line, opened 1926, runs from Dindigal to (76 m.) **Pollachi**, where it connects with the Coimbatore District Board Ry. to (25 m.) **Podanur** jn. (p. 629), on the S.I.R. broad-gauge line from Madras to Mangalore (Route 35).

37 m. from Dindigal is the famous hill shrine at **Palni** (D.B.K., alt. 1057 ft.), dedicated to Subrahmanya, an aspect of Siva, which stands on a picturesque hill, a continuation of the Kodaikanal range.

the image, known as Palni Andavar, represents the god as an infant. The two hillocks, Sakti and Siva, are said to have been given to the Sage Agastya to be placed in the south of India; Idambasura, a demon, to whom the Sage entrusted the task, carried them on his shoulders in a *Kavadi*, or pair of baskets, and they dropped at this spot. Many of the devotees who throng the road and who mostly perform the pilgrimage under a vow either of silence or of fasting, may be seen with *Kavadis* slung on a pole across their shoulders, these are filled with milk or sugar and taken round the temple on arrival. The women who visit Palni invariably sacrifice their hair; and the quantity left at the temple is sold annually to a contractor for several thousand rupees.

There is a motor service (S) from Palni to Dharapuram (22 m. N.)

Between **Udamalpet** (m. 57) and Pollachi, the line skirts a black cotton tract. To the S. are extensive sugar-cane plantations. On the lower slopes of the Palni hills, tea, coffee, and cardamoms are grown. Here may be the *Regis Pandionis* of Ptolemy.

Pollachi (76 m.) is situated opposite the **Palghat** Gap (p. 635). Branch line (33½ m.) to Palghat.

320 m. **Ammayanayakkanur** station, or Kodaikanal Road (D.B.K.). The distance to **Kodaikanal** (alt. 5855 ft.) is 50 m. by road. Motor services run. Rates (Nadar Motor Service and Villayan Motor Service) on application. This station (hotel and boarding houses) enjoys a growing popularity. There are places where the views of the low country and the Anamalai Hills to the W. are beautiful past description. Game (both big and small) is not easy to get. Nutmeg, cinnamon, and pepper-vine grow wild. Orange-trees, lime-trees, citron, and sago are cultivated. The Observatory, removed from Madras in 1899, stands 7700 ft. above sea-level in N. lat. 10° 13′ 50″, long. 5 h. 9 m. 52 s. E.

Kodaikanal Road is also the station for the Travancore hills, and for the Periyar lake, 80 m. The chief places in the Travancore hills are Vandiperiyar, Peermaid (Peermedu) and Kottayam; which can be reached by way of Thekkady (Periyar Lake). Motor-bus service from Kodaikanal Road to (62 m.) Cumbum, from Cumbum to (14 m.) Kumili, there is another bus service (enquiry should be made whether this is in operation), from Kumili to Thekkady the distance is 3 m., and from Thekkady to Kottayam 71 m. For **Kottayam** and **Periyar**, see p. 638 (Route 35).

345 m. **MADURA** station (R., D.B., pop. 1941, 239,144; alt. 442 ft.), upon the *Vaigai* river, crossed by a bridge 1134 ft. long (1874). From Madura may be visited caverns and rock-cut Jaina figures at Anaimalai and Alagarmalai. Motor services to Tirupattur (38 m.), Devacottah (60 m.) and Karaikudi (52 m.). A branch railway runs (56 m.) to *Bodinayakkanur*, at the mouth of a deep valley. The produce of the tea, coffee and cardamom estates on the Kanam Devan hills in Travancore passes through here. Madura was the capital of the Pandya Kings, one of whom sacked Anuradhapura, 1001 A.D. (p. 752). A Jesuit mission under the famous Robert de Nobili settled here in 1606 and made many converts by professing to accept the Hindu conception of caste.

The Great Temple[1] at Madura (about ½ m E. of the ry. stn.) forms a parallelogram about 847 ft by 729 ft., surrounded by nine gopurams, of which the largest is 152 ft. high. All the most beautiful portions of the temple as it now stands were built by Tirumala Nayak (1623-60). It is a twin temple—on the S. a temple to *Minakshi*, "the fish-eyed goddess," the consort of Siva, and on the N one to Siva, here called *Sundareswar*, the legend being that the god under this form married the daughter of the local Pandya Chief, an event celebrated by the annual car festival

Facilities, accorded for visiting all the outer courts and corridors up to the doors of the two adyta, make this temple the most interesting to visit of all the Hindu shrines of India, giving the most complete idea of Hindu ritual It should be visited at night as well as in the daytime, the dark corridors with a lamp gleaming here and there being peculiarly ghostly

The only entrance is by the gate of Minakshi's Temple, through a painted corridor about 30 ft long, which is called the Hall of the Eight Saktis, from eight statues of that goddess which form the supports of the roof on either side, in it various dealers ply their trade On the right of the gate at the end of the hall is an image of Subrahmanya, or Kartikkeya, the Hindu Mars On the left is an image of Ganesh

A second stone corridor follows, with rows of pillars on either side, called the *Minakshi Nayaka Mandapam*, built by Minakshi Nayak, Diwan of the predecessor of Tirumala Here elephants are kept. Some of the pillars have for capitals the curved plantain-flower bracket, but much of the detail is hidden by the stall shops.

[1] See Fergusson's *Ind. Arch.*, i, 391. Higginbothams, Madras, publish a *Tourists' Guide* to Madura.

At the end of the second corridor, 166 ft. long, is a large door of brass, which has stands to hold many lamps that are lighted at night.

A thick dark corridor, under a small gopuram, end in one broader, which has three figures on either side, carved with spirit, and leads to a quadrangle with a *Teppa Kulam*. This tank is called *Swarnapushpakarini*, or *Pottamarai*, "Tank of the Golden Lilies" All round it runs an arcade. On the N and E. sides the walls of this are painted with the representations of the most famous pagodas in India; from the S side a very good view is obtained of the different towers of the gopurams On the N.W side is the belfry, with an American bell of fine tone.

The corridor beyond the entrance to the temple has twelve very spirited figures, which form pillars on either side, six of them being the Yali, a name given to a strange monster which is the conventional lion of S India, sometimes represented with a long snout or proboscis Between every two Yalis is a figure of one of the five Pandava brothers (p lviii of the Introduction) First on the right is Yudhishthir, and opposite to him on the left is Arjun with his famous bow. Then comes Sahadeva on the right, and Nakula on the left Then follows Bhima on the right with his club, and opposite on the left, is the shrine of the goddess and the figure of a Dwarapalagam.

A gopuram leads from the Minakshi Temple into that of Sundareswar, surrounded by a fine corridor. On the S. side of it is a Nandi hall, and eight steps lead into the *Aruvatti Muvar, the Temple of the Saivite Saints*, in which are a very large number of statues of Hindu saints and gods. N.E. of the groups are chambers where gold-plated Vahanas, or vehicles, of Minakshi and Sun-

dareswar are kept. The jewel-house adjoining will be opened for a fee of Rs.15 There are two *palkis* (litters), and two with rods for canopies; also vehicles plated with silver, such as a *Hamsa*, or goose, a *Nandi*, or bull Among other treasures is a pair of golden stirrups presented by Mr Rous Peter, who was Collector of Madura from 1812 to 1828, and lived on a scale of regal magnificence

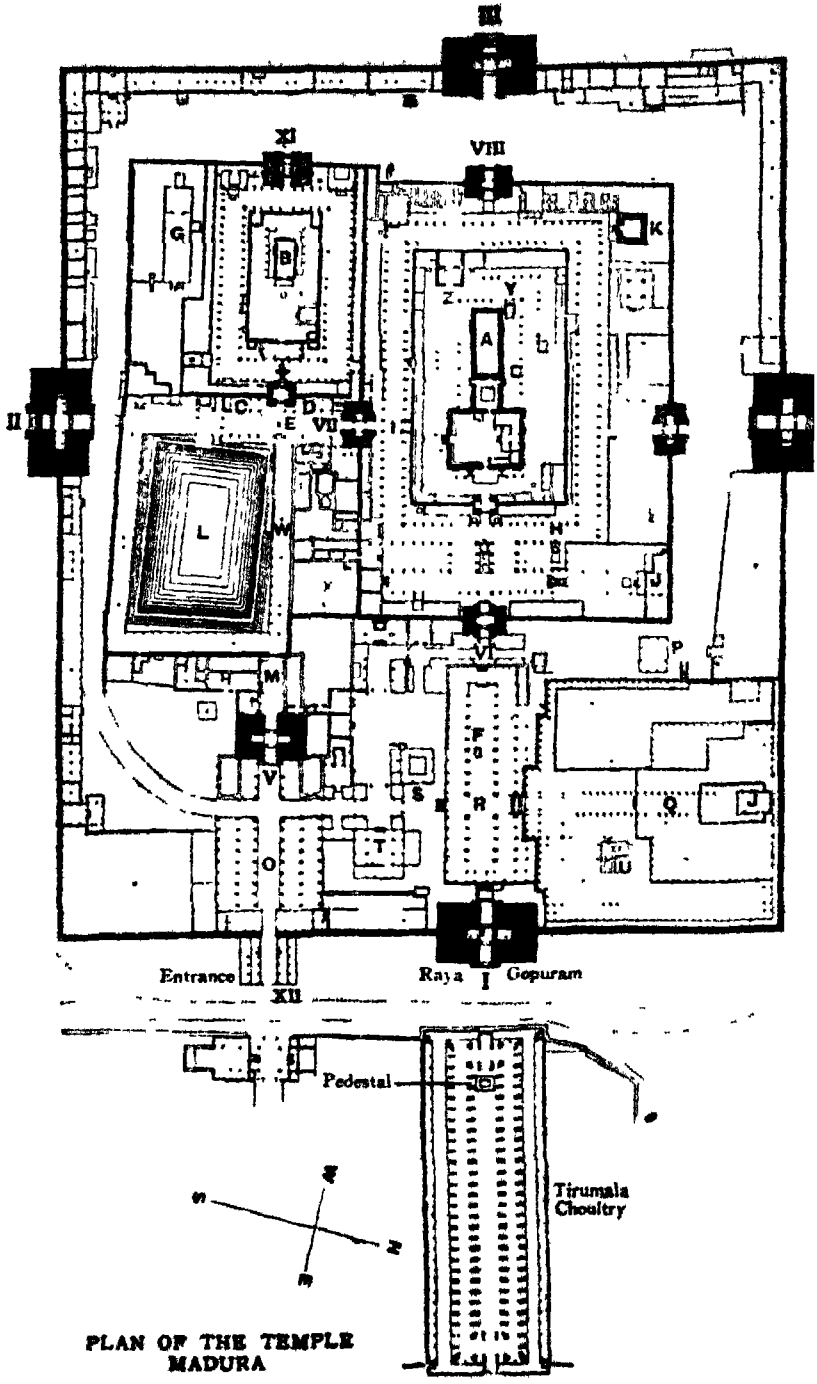
In the N.E. corner is the most striking feature of the temple—the *Sahasrasthambha Mandapam*, or **Hall of 1000 Pillars** There are in fact 997, but many are hid from view, as the intervals between them have been bricked up "There is a small shrine dedicated to the god Sabhapati, which occupies the space of fifteen columns, but it is not their number but their marvellous elaboration that makes it the wonder of the place" (Fergusson, *Ind Arch*, I, 392) Nearly all are different This hall was built *c* 1560 A D by Arianayakam Mudali, Minister of Vishvanath Nayakka, Founder of the dynasty. He is represented on the left of the entrance sitting gracefully on a rearing horse. In the row behind him are some spirited figures of men and women, or male and female deities dancing.

The *Great Raya Gopuram* is on the E. side of the hall, had it been completed in accordance with its foundations (174 ft by 107 ft) it would have been by far the loftiest gopuram in all S India

Outside the great gopuram is the *Pudhu Mandapam*, or New Gallery, known as **Tirumala's Choultry**, and built by him for the presiding deity of the place, Sundareswar, who paid him a visit of ten days annually on a pedestal provided at the end. It is also called the *Vasanta Mandapam*, as the visit was in the spring. If this building had been finished, it would have surpassed in magnificence all the other buildings of this monarch; and as the date of its construction is known (1623-45), it forms a fixed point in the chronology of the style

The hall, 333 ft long and 105 ft. broad over the plinth, has four rows of pillars supporting a flat roof, and on either side of the centre corridor five pillars represent ten life-size Nayakkas. Tirumala is distinguished by having a canopy over him and two figures at his back, the figure on the left is his wife, the Princess of Tanjore, with a gash on the left thigh where he stabbed her for some rude remark. On the left of the doorway a singular group represents one of theNayaks shooting a wild boar and sows, according to the legend, which says that Siva commiserated the litter of little pigs, took them up in his arms, and, assuming the shape of the sow, suckled them A portly figure, either that of Siva or the Nayak, is seen holding up the dozen little pigs Zodiacal signs are on the ceiling

¼ m from the temple to the S.E. is the **Palace of Tirumala Nayak.** The building, showing Saracenic influence, has pillars of rough granite cased with beautiful chunam or cement supporting scalloped arches, and is now utilised for public offices The main entrance—a granite portico built in honour of Lord Napier and Ettrick (Governor of Madras, 1866-72), who ordered the restoration—on the E. side gives access to a quadrangle 252 ft. by 151 ft. On the E., N., and S sides of this quadrangle is a corridor, the roof supported by arches resting on granite pillars 40 ft. high with carved backings. On the W and opposite the main



PLAN OF THE TEMPLE
MADURA

PLAN OF THE MADURA TEMPLE

Key to the Plan

A Shrine of God Sundareswar.
AA Pudu mandapam (Tirumala's Choultry)
B Shrine of Goddess Minâkshi-devi
C Small shrine of Ganeśa
D Small shrine of Subrahmanya.
E Vedi or Altar
F Nandi Pavilion
G Javandisvara mandapam
H Navagraha or nine planets
I Large Ganesa
JJ Shrines of Natesvar
K Poet's College
L Tank of Golden Lilies (Teppakulam)
M Mudali Pillai mandapam
O Ashta-Sakti hall
P 16 pillar mandapam
Q Thousand pillar mandapam
R Viravasantarâya mandapam
S Katyâna Sundara mandapam
T Servaikaran mandapam.
U Lingam
W Chitra mandapam
Y Ellamvatta siddha
Z Madura Nâyaka temple
I-IV Four outer Gopurams
V Tiruvachi Gopuram
VI, VIII, IX Three Gopurams of the second Prâkarâ
X, XI Gates to the Minâkshi prakàrâm
VII Gate between the temples
XII Ashta Sakti mandapam.

entrance stands the "Swarga Vilasam," or Celestial Pavilion, formerly the throne-room of the Palace. It is an arcaded octagon, covered by a dome 60 ft in diameter and 70 ft. high.

N of this is another hall, the two corresponding with the Diwan-i-Khas and Diwan-i-'Am of Mughal Palaces The hall is 140 ft long by 70 ft wide, and its height to the centre of the roof is 70 ft., and it is not unlike a Cathedral in the Gothic style (see Fergusson's *Ind Arch*, I, 412-14), although his illustration, taken from Daniell's drawing (made in 1792), exaggerates the proportions

The *Anglican Church*, designed by Mr Chisholm, C E, and built at the expense of Mr Fischer, a former well-known resident at Madura, stands in an open space in the middle of the town S W. of the Great Temple The Fort had a perimeter of 4 m

On the N side of the River Vaigai, N of the city, and about 1 m from the road bridge to Dindigal, is a curious building called the *Tamkam*, built by Tirumala for exhibiting fights between wild beasts and gladiators N again is the Civil Station

3 m E is the Vandiyur *Teppa Kulam*, enclosed by a granite parapet (1000 ft sq), and with a pretty temple in the middle On the way is passed a garden with a very fine specimen of the *Ficus indica* The main stem has been much mutilated, but is still 70 ft. in circumference. The ground shaded has a diameter of 180 ft in every direction.

Madura to Tuticorin, Tinnevelly, Quilon and Trivandrum.

From Madura a branch line, the old main line, opened 1876, to Tinnevelly, runs S. to Maniyachi junction Direct road to Tinnevelly.

401 m from Madras **Koilpatti** station. The beautiful rock-cut Jain figures and a monolithic temple (unfinished), dating about 950 A D), with turtle-backed roofs, at Kalugumalai, 13 m. from Koilpatti, are worth visiting

425 m **Maniyachi** junction for Tuticorin (for line to Tinnevelly, Quilon and Trivandrum, see p 667)

444 m **Tuticorin** station (Tuttukudi) (R, D B) Steamers leave regularly for Colombo (14 hrs.) The anchorage is 6 m. to 7 m from the shore Passengers are conveyed to and from the steamers of the B.I S N. Company by launches, but the journey from Madras to Colombo is better made by way of Dhanushkodi and Talaimannar (p 660). The **S.P.G.** have a mission-house here

Tuticorin was originally a Portuguese settlement, founded about 1540 In 1658 it was captured by the Dutch, and in 1782 by the British. It was restored to the Dutch in 1785, and occupied by the British in 1795. During the Poligar War of 1801 it was held for a short time by the Poligar of Panchalamkurichi It was returned to the Dutch in 1818, and finally handed over in 1825.

The old Dutch cemetery contains tombstones on which are

carved armorial bearings and raised inscriptions "Our Lady of the Snows," the principal Roman Catholic Church, was built by the Portuguese

Maniyachi to Tinnevelly, Quilon and Trivandrum

18 m. from Maniyachi jn. is **Tinnevelly Bridge** and 2 m farther **Tinnevelly Town** or Tirunelveli (D B) on the left bank of the Tambrapurni River, and 1½ m from it. On the other side is Palamcotta. A bridge (1843) of eleven arches of 60 ft span each connects the two Municipalities The railway bridge, five spans of 150 ft., was built in 1927.

Tinnevelly is the most Christianised District in India, with an Anglican Diocese, founded 1896 The S.P.G and the C.M S, established 1820, have important stations at the headquarters and at Palamcotta, as have also the Jesuits It was here that St Francis Xavier (1506-52) began his preaching in India

The *Temple* at Tinnevelly, as Fergusson said (*Ind Arch* I, 392), "has the advantage of having been built on one plan and at one time, without subsequent alteration or change" It is divided into two equal parts, of which the S. is dedicated to Parvati, the consort of Siva, and the N. to Siva himself, each 508 ft. by 378 ft. There are three gateways, or gopurams, to either half one being common to both temples, those on the E. being the principal, and having porches outside them On entering the Parvati temple is a porch, on the right of which is a *Teppa Kulam*, and on the left a thousand-pillared hall, which runs nearly the whole breadth of the enclosure, and is 63 ft. broad.

Palamcotta (D B furnished), is 3½ m. E. of Tinnevelly. The old fort has been demolished.

Between the bridge over the Tambrapurni and the fort stands the Church of the C.M.S, the spire of which is 110 ft. high. St John's College was built in 1878.

From Palamcotta to Cape Comorin (D.B.) is a distance of about 50 m along a fair unmetalled road There is a regular motor-service to Nagarcoil, 8 m from Cape Comorin, with Jain images (9th century)

Cape Comorin (D B K), "κομαρια ακρον" of Ptolemy and "Comori" of Marco Polo, is named from the temple of Kumari (the Virgin, an attribute of Durga) built at the southernmost point of the Indian peninsula The Cape is nearly as high as Table Mountain The temple and village stand on rocks. There are considerable remains of fortifications a few miles N of the temple, built by a Dutch officer, de Lannoy, in Travancore service The old Residency is now a Travancore State guest-house

To the E from Tinnevelly a line (38 m) connects with Tiruchendur (D B), which lies 20 m S. of Tuticorin on the coast Here there is a large and important temple dedicated to Subrahmanya, the god of war, and second son of Siva The temple contains some excellent sculpture and several inscriptions There is also a cave with rock-cut sculptures (on the list of preserved monuments

From Tiruchendur a N G ry runs to Kulasekharapatnam and Tissianvillai. S of Kulasekharapatnam is the prosperous Roman Catholic village of Manapad, lying under the shelter of a headland The church stands in a well-kept square. St Francis Xavier is said to have lived in a cave on the headland. Close to Tissianvillai (D.B.K.) is the Protestant settlement of Idayangudi, founded by Bishop Caldwell, who is buried there; also de Lannoy (above).

The railway to Travancore, opened 1904, turns W. from Tinnevelly, and runs to 22 m **Ambasamudram**; the nearest station for **Papanasham** (*papa*, "sin," *nasham*, "effacing"), 29 m by road from Palamcotta Near the Agastia temple the Tambrapurni river takes its last fall from the hills. The height is only 80 ft, but the body of water is greater than at Kuttalam, and a hydro-electric station is contemplated

45 m **Tenkasi** junction, 3 m from **Kuttalam** (Courtallam, D B), motors available, resorted to by Indians of position The S W winds pass over it through a gap in the W. ghats, and bring with them coolness particularly enjoyable in June, July, and August Comfortable bungalows may be rented (visitors should address the Collector at Tinnevelly regarding accommodation)

There are three falls in the Chittar river, the lowest having a plunge of 200 ft, but broken midway The average temperature of the water is from 72° to 75° F, and invalids derive great benefit The bathing-place is under a fine shelving rock, which affords a shower-bath The scenery is strikingly picturesque, with a mixture of bold rocks and woods Kuttalam is 38 m N W of Tinnevelly by road

A line from Tenkasi junction connects with Virudhunagar on the Madura Maniyachi section

50 m from Tinnevelly, **Shencottah** (D B) The line passes through a gap in the Western Ghats to Punalur (D.B) (81 m.), and so to

109 m. **Quilon** (D B.K.)—the Koilum of Marco Polo—on the W. coast in the Travancore State. Here the railway, opened 1918, turns S.

2 m from Quilon is **Tangasseri**, (Changana-Cheri), a British possession, 96 acres in extent. There are two cemeteries on the headland near the lighthouse. A ruined belfry stands in the centre of the Protestant graveyard. Fort Thomas, of which the greater part has fallen into the sea, was built by the Portuguese in 1503. Between Quilon and Trivandrum **Attingal** was the capital of the Tamburettis, who reigned over Travancore until 1758.

Near 129 m **Kadakavur** station On the sea-coast, close by, is the old English factory (1684) (still British territory) of **Anjengo**, and birthplace (1744) of Mrs Draper, Laurence Sterne's "Eliza," and of Robert Orme, the historian (1728) There is a Portuguese church, a massive laterite fort, and an English cemetery, in which the earliest tomb dates back to 1704 The factory was abandoned in 1810

149 m from Tinnevelly, **Trivandrum** (pop. 128,365; R., R.R, D.B., aerodrome), capital of Travancore, 44 m. by road S.E. of Quilon, is the headquarters of the Resident, Madras States Quite 25 per cent. of the population of the State is Christian.

The Travancore State, the ancient Kerala, has an area of 7265 sq. m. H.H Colonel Sultan Maharaja Sir Rama Varma, G.C.S I, G.C.I E., born 1912, succeeded in 1931. The ancient custom of descent from Chera rulers through the female line still prevails, both

in the royal family and in the Nair (Malayali Sudra) community.[1]

A Legislative Council was formed in 1888. Women over 21 have an equal franchise and can be members of both Chambers since 1933. The first woman minister was appointed in 1925 A new Constitution was granted in 1947. The Parliament House was built in 1939.

The fort at Trivandrum (Tiruvananantapuram) contains several Palaces and an old temple of Vishnu, known as the Padmanabha The palace in the Fort may generally be visited on application to the Private Secretary to the Maharaja. There is a Napier museum (1880), and a zoological garden, also a Gallery of Paintings (1935), ancient and modern Indian. The University (1935) was the gift of the Maharaja.

For the journey through the Malabar "backwaters" see Route 35 (p 637) A State bus service runs (60 m.) to Cape Comorin (p 667)

There are deposits of thorium in the State

Madura to Rameswaram Dhanushkodi

From Madura the route[2] proceeds S E to Manamadurai jn, **Ramnad** (Ramanatha-puram) and **Mandapam** (R, R H, Health examination by Ceylon Medical Officer). A Scherzer lifting railway bridge of 214 ft. span and a viaduct across the Pamban channel (total length 6739 ft.), built in 1914, carry the line to

Pamban on the island of Rameswaram (18 m long) The line runs from Pamban to **Dhanushkodi** (16 m) A steamer in about 2 hours crosses in the lee of Adam's Bridge (seven islands) to **Talaimannar** in Ceylon, 22 m. distant. The Customs' examination is held on the steamer There is an official money-changer on board. The boat train from Madras arrives at Dhanushkodi in the afternoon, and the journey from Talaimannar Pier to Colombo Fort station takes nine hours Sleeping accommodation and a restaurant car are provided.

A branch line runs from Pamban to **Rameswaram** (7 m) or Sarthoo Near the ry stn. is a building containing two long tombs, placed side by side, which are said to be those of Cain and Abel. They are in the care of the Muslim community There is no refreshment-room at Rameswaram station, and those who desire to visit the Temple should make the necessary arrangements at Mandapam In 1933 Europeans were excluded, and enquiry should be made.

The Dhanushkodi Fast Passenger avoids Tanjore and Madura, but can be joined at Trichinopoly or Manamadurai and arrives at Pamban at 6 30 A M. (intending travellers should verify this time). It is possible, on the way to Colombo, to spend some hours at Rameswaram and catch the Indo-Ceylon boat train at Pamban Junction; but passengers for Ceylon are not allowed to land at Talaimannar Pier without a pass from the Ceylon Medical Officer at Mandapam If possible, a railway trolley should be arranged for.

[1] The other great centre of mother right" in India must be sought among the Garos (p 487) and the Khasis (p 489) in the Assam hills Ovington, in his *Voyage to Surat in the Year* 1689, alludes to the Malabar custom "The sister's sons, as in Africa, and not the King's, are heirs to the crown, because the blood royal runs certainly in their veins." For full information regarding this and other interesting customs which prevail in Malabar, Mr J. A Thorne's notes to the second volume of *The Book of Duarte Barbosa* (Hakluyt Society, 1921) should be consulted.

[2] The Indo-Ceylon route from Trichinopoly jn (p. 656) to Manamadurai (opened 1930) avoids Madura.

The Temple of Rameswaram is a deeply-venerated Siva shrine founded, according to tradition, by Rama himself, and therefore associated with Rama's journey to Ceylon in search of Sita, as related in the *Ramayana* (p lviii, Introduction). An old vimana (on the right of the entrance corridor) contains Nandi bulls

By control of the passage from the mainland the Rajas of Ramnad derive their hereditary title of Setupati, "Lord of the Causeway." Statues of the Rajas are sculptured on the pillars of the *mandapams* and courtyard (*prakarams*)

The island is to a great extent covered with *babúl* (*Acacia arabica*) cocoanut and umbrella-trees It is inhabited principally by Brahmans

The great **Temple** stands on rising ground above a fresh-water lake, about 3 m in circumference, in the N. part of the island It is built in a quadrangular enclosure 657 ft broad by about 1000 ft long, entered by a gateway 100 ft high It is a grand example of the Dravidian sryle

The oldest portion is built of a dark, hard limestone Local tradition asserts that this part was erected by the Vara Raja Sekkarar, of Kandy, with stone cut and polished in Ceylon, and that its cost was defrayed by the seaport dues of all the coast towns during the year it was building The massiveness of the workmanship (slabs 40 ft long being used in the doorways and ceilings) and the wonderful pillared halls which surround the inner shrine are noticeable.

The temple consists of three *prakarams* (courts). Excepting the *mulasthanam*, or the innermost shrine, other portions of the first and second *prakarams* have been renovated with black granite. The corridors (not symmetrical) of the outer or third *prakaram* remain untouched.

Fergusson wrote: [1] "The glory of this temple resides in its corridors. These extend to nearly 4000 ft in length The breadth varies from 17 ft to 21 ft. of free floor space, and their height is apparently about 30 ft from the floor to the centre of the roof. Each pillar or pier is compound, 12 ft. in height, standing on a platform 5 ft from the floor, and richer and more elaborate in design than those of the Parvati porch at Chidambaram (p 649), and are certainly more modern in date"

Parts of these corridors have been blocked up to locate the *vahanams*, or vehicles, the temple offices, and the records The glory is thus partly lost The paintings on the ceilings and the colonnades are either fading away or have faded altogether

The temple, its ceremonies, and its attendant Brahmans are maintained from the revenue of seventy-two villages, granted mostly by former Rajas of the Ramnad *zamindári* The *lingam*, supposed to have been placed here by Rama, is daily washed with Ganges water, which is afterwards sold to pilgrims

[1] *Ind Arch*, 1, 380

BURMA

INTRODUCTION

This portion of the Handbook relating to Burma is retained (and revised) although war-damage must take years to repair, and some is irreparable, since the Japanese conquest in 1942

Means of Access.—The usual route to Burma is by train to Marseilles, by steamer to Bombay, rail to Calcutta or Madras, and thence by steamer to Rangoon The B I S N Co.'s steamers leave Calcutta for Rangoon three times a week, and Madras for Rangoon every Friday, the former voyage takes three days, the latter 90 hours and involves a delay in India. Through tickets are issued by the P and O Co for Rangoon *viâ* Bombay and Calcutta, and thence by B.I S N Co steamer. There is also a supplementary service by B I.S N Co. steamer from Calcutta to Rangoon *viâ* Chittagong (p 485), Akyab and Moulmein. The Apcar Line steamers of the B I S N. Co., which run from Calcutta to the Straits Ports and Shanghai, call at Rangoon. The quickest route is by air from England or from India *viâ* Akyab to Rangoon Although liners cross the Arakan Yomas and fly down the Irawadi valley, they do not make a stop, at Mandalay, for instance

Two steamship lines offer passenger service by the direct sea route to Burma A favourite route is by the Bibby line, which despatches steamers to Rangoon from Liverpool every alternate Friday. The Henderson Line (133 St Vincent Street, Glasgow) also maintains a fortnightly service from Liverpool to Rangoon. The steamers of both lines are large and well-found in every respect, and perform the sea journey from Liverpool to Rangoon in about 30 days They call at Marseilles and Port Said, and the traveller can join them at Marseilles by train, saving five or six days. The Bibby boats call at Colombo.

General Hints.—Letters of introduction will be useful Except at a few places, such as Rangoon, Moulmein, and Mandalay, there are no hotels, and the traveller, when he quits line of railway or Irawadi steamer, must get leave from the Deputy Commissioner of the district to put up at Government bungalows, and must take bedding, a cook and a few cooking utensils He will do well also to provide himself with some books about Burma A list of them will

be found at p. 681. Free use is made of the works there mentioned, and especially of Shway Yoe, in the following pages.

Inland Water Transport.—Ample facilities for visiting the interior are provided by the State railway and also by the Irawadi Flotilla Company. Services by express and cargo-boats are maintained between Rangoon and Mandalay, Bassein, and Henzada, between Mandalay and Katha and Bhamo, up the Chindwin, and for a short way up the Salween River, also on the Gyaing and Attaran Rivers (tributaries of the Salween). Practically every navigable creek in the Delta is served by smaller vessels of the fleet.

Inland Air Transport.—The Irawadi Flotilla and Airways run two services weekly to Yenangyaung (p 706); once weekly to Mandalay *viâ* Prome, and also to Moulmein and Tavoy

Climate, etc.—The climate of the country for some distance from the coast consists of a wet season, from 15th May to 15th November, and a dry season for the rest of the year. Farther inland the rain becomes less, and round Mandalay there is a "DRY ZONE", the best time for visiting the country is from November until February During the wet season the rainfall at Rangoon is heavy—amounting to upwards of 90 in., and after February the heat is considerable till the first showers fall in May

General Description.—The country of Burma lies to the E. of the Bay of Bengal, and covers a range of country stretching from the 10th to about the 28th parallel of latitude It is bounded on the N. and N.E. by China, on the N W. by Bengal, Assam, and the feudatory State of Manipur; and on the W. and S.W. by the sea. To the S.E. lies the kingdom of Siam The extreme length of the country is approximately 1200 m., and its extreme width between the 92nd and the 101st parallels of longitude at about 20° North latitude is 575 m. The total area, including the Shan States, is about 262,000 sq. m., and the population, according to the census of 1941, was 16 millions It is formed of four tracts—Arakan, the Irawadi Valley, the Shan States, and Tenasserim—and is watered by five great streams—viz., the *Irawadi*, the *Chindwin*, the *Sittang*, the *Salween*, and the *Myitngè* The first two rivers have their sources in the Northern chain of mountains in the interior, one head-stream of the Irawadi coming from Tibet, where are also the sources of the Salween; the Sittang flows S. from the Shan plateau, S E. of Mandalay, and the Myitngè W. from the northern part of the same plateau. The Irawadi and the Salween are great rivers which, in the lower part of their course, overflow the flat country below their banks during the rainy season, and, higher up, find their way through magnificent defiles. The Irawadi is navigable for over 900 m., but the Salween is prac-

tically useless as a means of communication, owing to the frequent obstacles in its channel.

The Northern portion of the country is in the main an upland territory containing much rolling country intersected by occasional hill ranges, and little plain The country throughout the Delta between Bassein and Rangoon is flat and uninteresting. Towards Prome the valley of the Irawadi contracts, and the wooded Arakan Yomas (highest point, Mount Victoria, 10,201 feet), cling to the Western bank nearly all the way to the neighbourhood of Thayetmyo, the old frontier between Upper and Lower Burma (1852-85). The Arakan Yomas terminate at Pagoda Point. The Salween Valley contains occasional harmonies of forest, crag, and mountain stream. On the other hand, the scenery in Tavoy and Mergui, and among the myriad islets which fringe the Tenasserim coast down to Victoria Point, the termination of a range which borders Siam, is beautiful. The forests of Burma abound in fine trees, teak in particular Rubber has been extensively planted in the S coastal area The bamboo grows to a height of sixty feet, and flowers every 30-40 years (last in 1943) The gold mohur flowers in March. Most of the country is green, in contrast to most parts of India. There is large game in the country, but it is not easy to get at, owing to the dense forests and the difficulty of obtaining experienced *shikaris* and baggage-animals, good bags of snipe are made all over the country from August to December, and small game shooting is to be had in many parts. Separate licences are issued for unprotected game (there is a close season), and for elephant.

The Bawdwin mines in the Northern Shan States contain rich silver-zinc-lead ore The Tavoy District is one of the largest wolfram-producing areas in the world. Tin is widespread. Seams of coal are unimportant. Mogôk in the N. supplies rubies, and sapphires are also found in the Shan States. Petroleum is obtained in quantities in the Minbu, Magwe, Pakôkku and Upper Chindwin Districts of Upper Burma. Jade and amber are extracted in considerable quantities in the Northern part of the Myitkyina District. In Lower Burma agriculture is the main employment of the people. Chillies, sesamum, tobacco, and sugar-cane are grown, and orchards are found near every village; but rice covers nine-tenths of the total area under cultivation. Over much of the area the soil is very fertile, and bears annual crops without any manure. In Upper Burma there is much greater variety of crops. Rice is the most important crop, but it occupies less than two-fifths of the total area under crop; sesamum, millets, beans, maize, ground-nut, cotton, tobacco, chillies and wheat are the chief crops after rice.

The commercial prosperity of the country has more than kept pace with its rapidly increasing population. The chief articles exported are rice, timber, beans, cotton, lead, cutch, hides, petroleum, candles, rubber, and rubies The chief imports are machinery, piece-goods, silk, cotton, wool, and provisions, especially preserved milk, biscuits, liquors, tobacco, iron, salt, sugar and mutton.

The main commercial industries are those connected with the rice, oil, and timber trade. The indigenous manufactures of the country produce little beyond what is required for home consumption. Silk, lacquered ware, gold and silver work, wood and ivory carving, are among the most justly admired of Burmese handicrafts. The best silks are woven at Mandalay. A Saunders' Weaving Institute has been established at Amarapura. The principal lacquer workers are at Pagan, gold and silver work is carried on at Rangoon, Moulmein, Thayetmyo, Mandalay, and in all the larger towns, the best wood carvers are in Rangoon, Tharrawaddy, and Mandalay, and the best ivory carvers in Rangoon and Moulmein Bronze statuettes are made in Pegu. The characteristics of Burmese art are vigour and novelty in design, but lacking in the finish of old Chinese or Japanese work. It may be studied in the Burma Court, Imperial Institute, London

Should Burma be visited after a tour in India, the traveller cannot fail to be struck with the great difference in the people. The merry, indolent, brightly-clothed Burmese have no counterpart in Hindustan. The life of the Burmese is free from the deadening effects of caste and seclusion of the women, who take an important part in commerce. There are many Indians in the larger towns and villages and in the railway zone, and a sprinkling of Chinese, especially carpenters

The Burmese as a race are of short stature and well-built The men have little or no hair on their faces: they show unmistakably their near relationship to the Mongolian The women are attractive-looking. Men and women alike are well clad, and delight in gay colours and silk attire. They are passionately devoted to sport, crowd to race-meetings, and even in their villages have bullock-cart races, while they will spend hours in basket-ball kicking (chinlon). Association football is popular.

In religion the Burmese are Buddhists, but the great majority everywhere, and practically all village Burmans, retain the primitive reverence for the *nats*, the spirits of the forests, mountains, etc. The Burman gives alms to the monks, "but he governs his life and actions by a consideration of what the spirits of the air, the forest, the stream,

the village, or the house may do if they are not propitiated." To these *nats*, who have their appropriate shrines, he makes offerings to avert misfortune, and of them he seeks favour for any undertaking, such as building a house or a boat, or making a journey. Each family has a tutelary deity or *nat* of its own, to which a thank-offering is made at the birth of a child or the solemnisation of a marriage. Every Burman is supposed to spend a certain part of his life as a novice, wearing the yellow robe, in the *pôngyi kyaung* (monastery). This may be for a single week; but some become *pôngyis* or monks. The monks are traditional schoolmasters subject to the popularity of modern schools. The shaven head, yellow robe and begging-bowl of the monk are seen everywhere. Monks are cremated.

History.—In Upper Burma there are traces of prehistoric Stone Age culture, but generally Burma is a country of discarded capital cities At Tagaung, on the left bank of the Irawadi, far to the N., in the Katha district, there are traces of a royal city which is said to date back to the ninth century B.C The Burmese who, issuing from the highlands of Central Asia, founded it, were driven S. in the second century A.D to Pagan, near Myingyan. Here the great King Anawrata reigned from 1044 to 1077 A.D He was to Burma what Asoka was to India In the closing years of the thirteenth century his empire fell before the invading armies of Kublai Khan, and in 1287 Pagan became a feudatory of China. Thado Min, who claimed descent from the Kings of Tagaung, restored Burmese supremacy in 1364 and set up his capital at Ava, near Mandalay Bayin Naung, the famous general of Tabin Shweti (1530-1550) of the house of Anawrata, succeeded his master as King of Pegu in 1551, and ruled until 1581 over the whole of Burma except Arakan. Cæsar Frederick, writing of Pegu in 1569, stated that he had "twenty-and-six" kings at his command, and Samuel Butler had him in mind when he wrote in *Hudibras* (I ii. 155) of demeanour "grave as the Emperor of Pegu." The city of Pegu became a great commercial centre and was visited in 1587 by Ralph Fitch. In 1740 the great Talaing rebellion by a race in the S. dispossessed the Burmese dynasty, which had returned to Ava, first of Pegu and then of Ava itself, which was captured and burned, but immediately after the fall of Ava (1753) a Burmese champion, Alaungpaya (known to Europeans as Alimpra), re-united the whole country under his sway.

So far as we have record, the first European to visit Burma was a Venetian merchant, Nicolo di Conti, who landed at Tenasserim in 1435 A.D. and travelled to Ava overland Early in the following century Portuguese adventurers were importing firearms into the

country and serving as mercenaries in the armies. In 1599 Felipe de Brito y Nicote seized the Burmese port of Syriam with the intention of carving a Portuguese province out of Lower Burma He withstood Arakanese attacks, took Prome and Toungoo in 1610, but he was dislodged by the King of Ava and executed in 1613 About the same time the Dutch may have settled on the island of Negrais at the mouth of the Rangoon River. In 1631 they planted a factory at Syriam, which endured until 1680 Although in 1617 two factors of the English East India Company were sent from Masulipatam to the city of Pegu to collect the goods of a Company's servant who had died there, after capture by the Burmese in Siamese territory, the first English factory in Burma was not established until 1647, when a short-lived one was founded from Fort St George at Syriam, which failed ignominiously nine years later Thenceforward the Directors refused all offers, whether from a Burmese source or from their servants at Fort St George, to re-establish the factory From time to time, however, an important private trade was maintained by the Company's officials and others in Burma, until in 1743 the old factory at Syriam was destroyed by rebellious Talaings Through the efforts of Dupleix a French shipyard was established at Syriam in about 1732, but was abandoned ten years later In 1748 French agents were again active, and the English therefore seized the island of Negrais in 1753 A struggle ensued between the Talaings supported by the French and Alaungpaya who was favoured by the English

In 1755 Alaungpaya defeated the Talaings and founded Rangoon (Yan-gŏn, the "end of strife") Shortly afterwards he destroyed Syriam and killed or enslaved all the Frenchmen he could lay hands upon The English were permitted to open a factory at Bassein. but in 1759 the Negrais settlement was destroyed and the factors massacred, upon a false accusation that they were assisting the Talaings Alaungpaya died in 1760 while campaigning against Siam His successor, Naungdawgyi refused reparation for the Negrais massacre and the Bassein factory was withdrawn in 1761 Thereafter official relations ceased until 1795 Sinbyuyin, who succeeded Naungdawgyi, took Manipur and Siam, and defeated two inroads from China. He died in 1776, and was succeeded by Bodawpaya, who conquered Arakan in 1784 This brought Burma into collision with the British in Chittagong. The Arakanese outlaws took refuge over the border, the river Naaf, and harassed the Burmese rulers by inroads. This gave rise to friction, and in order to assist in the adjustment of matters in dispute, an envoy was sent to Burma in 1795 by the Governor-General of Bengal. In 1819 Bodawpaya died, and was succeeded by Bagyidaw. Matters had not improved on the border, and in 1824 the Burmese invaded Manipur and Assam, and Maha Bandula, the great Burmese General, started with an army from Ava to take command in Arakan and invade Bengal.

The British Government formally declared war against Burma on 5th March 1824 The Burmese were driven out of Assam, Cachar, and Manipur, and Rangoon, Mergui, Tavoy, and Martaban were occupied by British troops. These, however, suffered much from sickness as the rains began soon after the capture of Rangoon on 11th May The *Diana* steamer built in Calcutta was the first to take part in a naval action All movements by land became impracticable, and by December the force occupying Rangoon had been reduced by sickness and otherwise to about 1300 Europeans and 2500 Indians fit for duty The Burmese, under Maha Bandula, made a confident effort to drive the invaders into the sea, but their attack, in which 60,000 men are said to have taken part, was repelled with great slaughter, and the Burmese army dwindled away, a portion of it retiring to Danubyu, which Maha Bandula fortified with some skill for a further effort The British troops, having been reinforced, marched up the Irawadi Valley, and on 2nd April 1825 took Danubyu Maha Bandula was killed in the cannonade, and all serious resistance came to an end Prome was occupied, and the troops went into Cantonments for the rains In September 1825 the Burmese endeavoured to treat, but, as they would not agree to the terms offered, hostilities recommenced, and in December the British advanced, and, after several actions, reached Yandabo (60 m from Ava), 16th February 1826. Here the envoys of the King signed a Treaty ceding to the British Assam, Arakan, and the coast of Tenasserim, and agreeing to pay a million sterling towards the cost of the war In November 1826 a commercial Treaty was signed at Ava, and in 1829 the first British Resident was appointed under the Treaty to the Burmese capital In 1837 Bagyidaw was deposed by his brother Tharrawaddy, who in 1846 was succeeded by his son Pagan Min

In 1852, owing to high-handed action against British subjects by the Burmese Governor of Rangoon, for which all reparation was refused, the British again declared war against the King of Burma, and toward the close of the year Lord Dalhousie proclaimed that the whole of the Province of Pegu, as far N. as the parallel of latitude 6 m. N. of the fort at Myede, was annexed to the British Empire. Almost immediately after this Pagan Min was deposed by his brother Mindon Min, who ruled his curtailed kingdom with wisdom and success.

The pacification of Pegu and its reduction to order occupied about ten years of constant work. In 1862 the British possessions in Burma —namely, the Provinces of Arakan, Pegu, Martaban, and Tenasserim —were formed into the Province of British Burma, under the administration of a Chief Commissioner, Lieutenant-Colonel (afterwards Sir Arthur) Phayre being appointed to that office. The Burma Commission consisted of military officers

In October 1878 King Mindon died, and was succeeded by his

son, King Thibaw, fifth in descent from Alompra. Early in 1879 the execution of a number of the royal family excited much horror in Lower Burma, and relations became much strained, owing to the indignation of Englishmen at the barbarities of the Burmese Court, and the resentment of the King and his Ministers at the protests of the British Resident In October 1879, owing to the unsatisfactory position of the British Resident in Mandalay, the Government of India withdrew their representative from the Burmese Court. Meanwhile, under the lax rule of Thibaw the condition of Upper Burma had been gradually drifting from bad to worse. The Central Government lost control of many of the outlying districts, and the elements of disorder on the British frontier were a standing menace to the peace of Lower Burma The King, in contravention of Treaty obligations, created monopolies to the detriment of the trade of both England and Burma, representatives of France and Italy were welcomed, and two separate embassies were sent to Europe for the purpose of contracting alliances In 1885 the Burmese Court imposed a fine of Rs 2,300,000 upon the Bombay-Burma Trading Corporation, and refused the proposal of the Indian Government to submit the matter to arbitration In view of the long series of unsatisfactory episodes during Thibaw's reign, the Government of India decided once for all to adjust relations An ultimatum was sent to King Thibaw, requiring him to suspend action against the Corporation, to receive at Mandalay an envoy from the Viceroy, who should be treated with the due respect, and to regulate the external relations of the country in accordance with the advice of the Government of India This ultimatum was despatched on 22nd October 1885 On 7th November King Thibaw issued a proclamation calling on his subjects to drive the British heretics into the sea On 9th November his reply was received in Rangoon amounting to an unconditional refusal On 14th November 1885 the British expedition, under Sir Harry Prendergast, crossed the frontier and advanced to Mandalay without encountering any serious resistance. On 28th the British occupied Mandalay, and next day the King and his evil genius, the Queen Supaya Lat, were sent down to Rangoon and afterwards to India He died at Ratnagiri, S of Bombay, on 16th December 1916 Upper Burma was formally annexed on 1st January 1886 For four years the country was disturbed by lawless spirits, but by the close of 1889 all the larger bands of marauders had been broken up In the time of Burmese rule China claimed a certain shadowy suzerainty over the Burmese empire In July 1886 a Convention was signed at Peking, whereby China recognised British rule in Burma, and agreed to the demarcation of the frontier and the encouragement of international trade By a further Treaty, signed on the 1st March 1894, the frontier was defined, and new arrangements made for the encouragement of trade and the linking of the telegraph systems of Burma and China. A breach of the Treaty by

the Chinese in 1895 led to the conclusion of a supplementary agreement on the 4th February 1897, which defined the boundary afresh and made further provision for opening China to trade For some years after the annexation of Upper Burma there was some uncertainty with regard to the boundary between Siam and a portion of certain of the Shan States The Siamese claimed as part of the Province of Chengmai so much of Karenni, and of some other small States, as lay to the east of the Salween In order to investigate these claims the territory was visited by Mr Ney Elias in 1890 The Siamese refused to take part in that exploration, but in 1892-3 a Joint Commission of English and Siamese officers demarcated the frontier along the line selected by Mr Ney Elias In 1897 the Province was constituted a Lieutenant-Governorship under Sir Frederick Fryer Sir Harcourt Butler, G C I E , K.C S I , became the first Governor in January 1923 Sir A D Baillie Cochrane assumed office in May 1936, with a mission to carry through the separation of Burma on 1st April 1937, under the Government of Burma Act of 1935, with two Legislative Chambers, a Senate and a House of Representatives, but a Constituent Assembly (1947) framed a new Constitution. The offices of Secretary and Under-Secretary of State and High Commissioner for Burma are in London, Commonwealth Relations Office

Burma has a National Flag (1939) a blue ensign, with a peacock, or, "in his proper pride," copied from the coinage of King Mindon Min in 1852 The Governor since 1946, Major-General Sir Hubert Rance, G C.M G , K C I E , G B E , C B , retired 4th January 1948 when Burma became an Independent Republic with a new flag

Pagodas and Monasteries.—The pagodas and monasteries form the chief objects of interest throughout Burma *Pagodas*,[1] differing in details, consist almost invariably of a masonry terrace, a high plinth, a bell-shaped body and a *hti* or "umbrella" spire, a construction formed of concentric rings of beaten iron lessening to a rod with a small vane on the top From the rings hang little bells with clappers shaped like *pipal* leaves, which are caught by the least wind and maintain a melodious shivering. They are erected over relics of Gautama Buddha In almost all the larger pagodas there are arched wings on each face, serving, as it were, as antechapels, and each containing a figure of Gautama, while the platform is frequently studded with minor temples, image houses, altars for the deposit of offerings, large bells, flag posts, images of strange monsters—"sinthas" (hence Chindit) These pagodas are to be found in every village in Burma, capping the hills frequently in out-of-the-way places There is a

[1] Attention is invited to the footnote on p 684 with regard to the removal of shoes and boots.

special reason for this multiplication of fanes. The builder is looked upon as a saint on earth, and when he dies he attains Nirvana It avails little to repair a previous dedication, unless it be one of the great world-shrines at Rangoon, Pegu, Prome, or Mandalay. According to custom and tradition, in order to prevent the admixture of *karma*, or merit, shrines built by royalties must not be repaired by commoners, and among commoners themselves the previous consent of the original founders, or their descendants, is always necessary.

Outside most villages there stands a *monastery* or *pôngyi kyaung*, where the monks pass their tranquil lives and supply a simple education to the children of the village Ordinarily of teak, the shape is always oblong, and the inhabited portion is raised on posts or pillars some 8 ft or 10 ft above the ground They are never more than one storey high, for it would be an indignity to a holy monk to have anyone over his head A flight of steps leads up to the veranda, which extends all along the N and S sides and frequently all round the building. The steps are usually adorned with carvings or plaster figures of *nats* or ogres From the raised floor rises the building with tier upon tier of dark massive roofs capped at intervals with tapering spires or *pyatthats* The buildings are in many cases ornamented with the most elaborate carving The interior accommodation is very simple It consists, in the main, of a great central hall divided into two portions, one level with the veranda where the scholars are taught, and the other a raised dais 2 ft or so above the level of the building. Seated upon this the priests are accustomed to receive visitors, and at the back, against the wall, are arranged images of Gautama interspersed with manuscript chests, small shrines, fans, and other religious implements, and miscellaneous gifts of the pious, heaped together ordinarily in very careless fashion There are occasionally dormitories for the monks, but, as a rule, they sleep in the central hall, where the mats which form their beds may be seen rolled up round the pillows against the wall In many monasteries there is a special room for the palm-leaf scribes, often detached from the main building, as are the cook-room and the bathing-houses and, perhaps, a guest-house In one corner is usually a *thein*, for the performance of rites and ceremonies, and particularly for the examination and ordination of priests The visitor should not intrude unless he can speak Burmese or is accompanied by someone acquainted with that language The priests are treated with great respect by the people, and are invariably addressed as *paya*, or lord , and anyone who visits a monastery should therefore bear in mind that the monks are accustomed to be treated with deference The chief priests are called Sayadaw

Pwés. —The traveller should make a point before leaving Burma of seeing something of the *Pwé*, the national amusement of the people.

Pwès are of four kinds—the *Zat pwè*, which consists of acting, singing, dancing, and clowning; the *Yokthe pwè*, in which a similar performance is gone through by marionettes; the *Yein pwè*, a kind of ballet, with music and song, performed by a considerable company of young men or maidens, as the case may be; and the *Anyein pwè*, in which the number of actors is very limited it also is accompanied with song and music, lasting from about 9 P M to about 2 A M Yein pwès are performed on special occasions—in honour of some high official, or at a great pagoda feast, but Zat pwès, Yokthe pwès, and Anyein pwès are of constant occurrence on nearly all moonlight nights The performances take place in the open air, last all night, and usually for several nights in succession, and are free and open to all, the actors being paid by the giver of the entertainment The majority of the audience stay the whole night, but an hour or two of the performance will satisfy the traveller

LIST OF SELECTED BOOKS ON BURMA

R Grant Brown, *Burma as I saw It* (1889-1917) (Methuen, 1926)

W. W Cochrane, *The Shans* (Rangoon, 1915)

C M Enriquez, *A Burmese Arcady.* (Kachins, etc) (Seeley Service, 1923)

G E. Harvey, *Outlines of Burma History* (Longmans, 1924) An excellent Sketch for the visitor (Illustrated)

D G E Hall, *Early English Intercourse with Burma* (Longmans 1928)

R. Talbot Kelly, *Burma* (Illustrated) (A. & C Black, 1912)

V. Scott O'Connor, *The Silken East.* (Hutchinson, 1904.)

Sir J. G. Scott, *Burma a Handbook of Practical Information.* (Daniel O'Connor London, 1921)

Sir J G Scott, *Burma from the Earliest Times to the Present Day.* (Fisher Unwin, 1924)

Shway Yoe (Sir J. G Scott), *The Burman, His Life and Notions.* (Macmillan, 1910)

Taw Sein Ko, *Burmese Sketches.* (Rangoon, 1913.)

Sir J. G. Scott, *Burma and Beyond* (Grayson, 1932).

F. Tennyson Jesse, *Story of Burma.* (Macmillan, 1946.)

GUIDE TO THE PRONUNCIATION OF BURMESE PROPER AND PLACE NAMES.

(Prepared by Prof D G E HALL, of University College, Rangoon)

Note.—The phonetic scheme is based upon that used in the Oxford Pocket Dictionary and explained on p viii of that work.

AKYAB, Ăk-e-ăb.
A'MARAPURA, accent on first syllable
ANAWRAT'A, Ăn-ŏi'-'*a*-tah'
AVA, Ah'-vä
BAWDWIN, Baw'-dwin
BASSEIN, Bă-sān'
BHAMO, Bah-mō'
BILUGYUN, Bē'-lōō-jōon'
CHINDWIN, Chĭn-dwĭn
DAINGWUNKWIN, Dīng' - wōōn-kwĭn'
DANUBYU, Dă'-nōō-bew
DURANTHEIN, Dōō-kăn-thān
EINDAWYA, An-daw-yah
GOKTEIK, Gō'-tāk
GYAING, Jĭng
GYOBINGAUK, Jō-bĭn-gowk
HEHO, Ha-hō'
HEINSUN, Hān-sŏon
HENZADA, Hĕn-*za*-da'
HLAING, Lĭng
HMAWZA, Maw-zah
HPAYON, P*a*-yŏn'
HSIPAW, Sē'-paw
INSEIN, In-sān, more correctly, In-sān
INYE, In-yā
KADAIK, K*a*-dīk
KADO, K*a*-dō'
KALE, K*a*-lā
KALEWA, K*a*-lā'-wah
KALYANISIMA, Kăl-yăn-ĭ-sē-m*a*
KATHA, Kă-thah'
KAUNGNGO, Kowng-ō
KAWHNAT, Kaw-năt
KWANHLA, Kwŏn'-lah
KYABIN, Chah-bĭn
KYAIKKAUK, Chīk-kowk
KYAIKPUN, Chīk-poŏn'
KYAIKTHANLAN, Chīk-thăn-lăn
KYANGIN, Chăn-gĭn
KYANZITTHA, Chăn-zĭ-thah
KYAUKMYAUNG, Chow-myowng.
KYAUKPANDAUNG, Chowk-păn-downg
KYAUKPYU, Chowk-pyŏō
KYAUKSA, Chowk'-să
KYAUK TAW GYI, Chowk Taw Jē
KYAUKZEDI, Chowk-zā-dē
KYONKADAT, Chŏn-k*a*-dăt
KYONPYAW, Chŏn-pyaw.
LEIKSAW, Lāk-saw
LETPADAN, Lĕt-p*a*-dăn'
MAGWE, Mă-gwā'
MAINGKAING, Mīng-Kĭng
MAYMYO, Mā'-mew
MEIKTILA, Māk-tī-l*a*
MERGUI, Mĕr-gwē'
MIGADEIKPA MIN-NGÈ, Mē'-gah-dāk'-pah-mĭng'-ā
MINGALADON, Mĭn-g*a*-l*a*-dōn'.
MINHLA, Mĭn lah
MOGOK, Mō-gŏk'
MONYWA, Mŏn'-yōō-ah.
MOULMEIN, Mōōl-mān
MUPUN, Mōō-pōon
MYEDE, Mya-dā'
MYINGYAN, Mĭn-jahn'.
MYITKYINA, Mĭ-chĭ-nah'
MYITNGE, Mĭng'-ā
MYITTHA, Myĭ-thah
NAGAYON, Nah-g*a*-yŏn
NATKYIGON, Năt-jē-gŏn.
NAUNGLON, Nowng-lŏn
NAUNGPUAUNG, Nowng-pōō-owng
NEGRAIS, Nē-grā'-ĭs
NGAWUN, Nah-wōon
NYAUNGBINZEIK, Nyowng-bĭn-zāk.
NYAUNGU, Nyowng-ū.
PA-AN, P*e*-ăn'
PAGAN, P*a*-gahn'
PAGAT, P*a*-găt'
PALETWA, Pă'-lā-twah'
PATODAWGYI, Pát-ō-daw-jē
PAUNGDE, Powng-dē
PAZUNDAUNG, Poozeh-dawng
PROME, Prōm
PYINBONGYI, Pĭn'-bōn-jē.
PYINMANA, Pĭn-m*a*-nah'.
PYINTHA, Pĭn-thah
SAGAING, S*a*-gīng'
SALEMYO, S*ah*-lā-myŏ
SEIKGYI, Sāk-jē
SHEINMAGA, Shān-m*a*-gah'
SHINBINKUGYI, Shĭn-bĭn-kōō-jē

SHITTAUNG, Shĭt-towng
SHWEAUNGYO, Shwā-owng-jō′.
SHWEBO, Shwā-bō
SHWE DAGON, Shwā-D*a*-gōn′
SHWEGUGALE, Shwā-gōō-glā′
SHWEHMAWDAW, Shwā′-maw-daw′
SHWEMOKTAW, Shwā-mōk-taw
SHWENANDAW KYAUNG, Shwā-nān-daw-chowng.
SHWENATTAUNG, Shwā-nāt-towng
SHWENYAUNG, Shwā-nyowng
SHWESANDAW, Shwā-sān-daw
SHWETHALYAUNG, Shwā - thàl-yowng′
SITTAUNG, Sĭt-towng
SULE, Sōō-lā′
TAGAUNG, T*a* gowng.
TANGYAN, Tān-jahn
TAUNG-GYI, Towng-jē
TAUNG-WAING, Towng-wĭng
TAVOY, T*a*-voy′
TENGYUEH, Teng-yōō-ĭ
THABEIKKYIN, Th*a*-bā′-chĭn
THATBYINNYU, That-byĭn-nyōō
THATON, Th*a*-tōn
THAYAUNG - GAING, Th*a*-yowng-jawng
THAYETMYO, Thā-yĕt′-myō
THAYEKHETTAYA, Th*a*-yā-kĕt-tạ-yah
THAZI, Thah-zē
THEINDAWGYI, Thān daw-jē.
THIBAW, Thē-baw
TIGYAING, Tē-jĭng
TOUNGOO, Tow-ngōō′
YAMETHIN, Y*a*-mār′-thĭn
YANKINTAUNG, Yān-kĭn-towng
YEBAWMI, Yā-baw-mē
YENANGYAUNG Yĕ-nan jowng
ZAING, Zĭng
ZEGYO, Za-jō.
ZINGYAIK, Zĭn′-jĭk
ZWEGABIN DAUNG, Zwā′-g*a*-bin-downg

The letter *a*, when printed in italics, denotes that the sound is indeterminate

ETYMOLOGY OF PLACE NAMES IN BURMA.

Some of the more common component parts in place names with their meanings are given below —

AING, small lake
CHAUNG, stream
HAUNG, old
KAN, tank
KON, high ground
KYI, big
KYUN, island.
LE, rice land
MYO, town
NGE, small
PIN, tree
SE, dam, weir
SEIK, landing-place
TAUNG, hill
TAW, jungle
THIT, new
WA, mouth.
YWA, village.

RANGOON.

[*Map faces p.* 690.]

RANGOON * is the capital of the country and the seat of the Government It is laid out in blocks on the American plan with cross streets, main road, etc , just 21 m. from Elephant Point on the sea, on the Rangoon River In 1852 it was a mere fishing village. In 1931 it had a trade larger than that of any Indian port except Calcutta and Bombay. The imports are principally coal, cotton goods, silk, and sugar , the exports, rice (two-thirds of the whole), timber and oils

Population figures can not be given. One quarter of the city was destroyed during Japanese occupation between March 1942 and 3rd May 1945

A service of motor-buses (1926), and trolley-buses (1936), runs to all parts An electric tramway (horse in 1882, steam in 1905) runs E. and W. through the town and business quarters, and to the Shwe Dagon Pagoda with a power station at Alone The municipality covers an area of about 28 sq m There is a Pasteur Institute here.

Rangoon city consists of the municipality, the former Cantonment, and the port. It is lit with electricity. Its water-supply is obtained from a large reservoir lake constructed at Hlawga, about 17 m. N. of the town, but a scheme of supply 43 m. distant in the Pegu Yomas has been approved

Drainage consists of gravitating sewers into ejectors. These discharge their contents automatically into a main sewer, through which all the night soil and sullage water are forced into an outfall near the mouth of the river. Great damage has been done

The business quarter lies along the N. bank of the river, from Kemendine and Alone on the W. to Pazundaung on the E. with Barr Street Wharf (1933) and Brooking Street Wharf (1939)

On the W of the river is the suburb of Dalla, which was a place of note before Rangoon was founded (see p. 676) The Twante Canal runs to the China Bakar river, a mouth of the Irawadi.

In October 1928 a new **Cantonment** was opened at **Mingaladon**, 15 m to the N of the city (Cantonment rly stn) and two-thirds of the area of the old Cantonment was handed over to the Burma Government Indian troops were evacuated in April 1937. The aerodrome is at Mingaladon.

The principal objects of interest in and around Rangoon may be classified as follows :—

1. The pagodas and monasteries.
2. The bazars and Indian shops
3. The rice, timber, and oil works.
4. The public buildings.
5. The University.
6. The parks and lakes
7. The remains at Syriam

(1) **Pagodas and Monasteries** [1]— The *Shwe* (golden) *Dagon* and the *Sule* deserve special mention The great **Shwe Dagon Pagoda** is the most venerable of all places of worship in Indo-China Its peculiar sanctity is due to the fact that it is the only pagoda

[1] Europeans intending to visit shrines in Burma are warned that in recent years the Burmese have insisted upon all visitors discarding their footwear before entering the precincts If the notice "Footwearing prohibited" is displayed at the entrance to a pagoda, it should be scrupulously adhered to.

known to Buddhists which is credited with containing actual relics, not only of Gautama, but of the three Buddhas who preceded him in this world. Hence it attracts countless pilgrims, not only from all parts of Burma, but also from Cambodia, Siam, Korea, and Ceylon It is situated about 2 m from the Strand, and may be reached by motor-omnibus, trolley-bus (little used by Europeans), taxi or ticca gharry

The stately pile stands upon a mound, 168 feet high, partly artificial, cut into two rectangular terraces one above the other, each side, as in the case of all pagodas, facing one of the cardinal points of the compass The upper terrace, which has been carefully levelled and paved and repaved by the pious, is 900 ft long by 685 ft wide The ascent is by four flights of brick steps, one opposite the centre of each face—the Western face was once closed by fortifications built by the British conqueror to secure the pagoda, where there was much desperate fighting in the First Burmese War

The S ascent is most frequently used. Under the regulation (1921) visitors of all nationalities must go up the Pagoda barefooted At the foot are two gigantic leogryphs, built of brick and covered with plaster From them up to the platform the long stairs are covered by a rising series of handsomely-carved teak roofs, supported on huge wood and masonry pillars The heavy cross-beams and the panelling are in many places embellished with frescoes representing scenes in the life of Gautama and his disciples, and with hideously curious representations of the tortures of the wicked. The steps themselves are exceedingly primitive, in parts of broad stone flags, and in others of simple sun-dried bricks, worn by the feet of myriads of worshippers On either side are beggars and numerous stalls, at which gold-leaf, flowers, and other offerings may be bought, and on the E side, just a little above the bottom of the flight of steps there is a small bazar in which marionettes, gongs, drums, etc , may be obtained

The stairs debouch on a broad, flagged space, left free for worshippers In the centre of this springs, from an octagonal plinth, the pagoda itself (see Fergusson's *Eastern Architecture*, 2, 342-7) It has a circumference of 1355 ft , and rises to a height of about 368 ft , or a little higher than St Paul's Cathedral The pagoda is reputed to contain 25 tons of gold and 100 of silver It is solid and gilt from base to summit The former *hti*, or "umbrella," which was placed on the top by Mindon Min, King of Burma, was destroyed by earthquake (5th May 1930) and the present top inlaid with diamonds was hoisted a year later The ceremony was attended by pilgrims from all parts of Burma. The pagoda is encircled by several rings of electric lamps, which make it a conspicuous landmark by night

At the corners of the basement are figures of *Manökththa*—creatures with two bodies and one head, half-lion, half-man, with huge ears and ruffled crest—and all about are figures of lions displaying teeth between grinning lips The tale is that a certain Indian Princess became the wife of a lion , subsequently this lion was slain by his own son Soon after the Prince was seized with a severe ailment, which could be cured only by dedicating to a pagoda the figure of a lion Since then, it is said, the placing of the figures of lions at the entrances of pagodas

has been in vogue In reality these lions are the *dwarpalas*, or guardians of the entrance to the pagodas, and were probably relics of the pre-Buddhist cults of India

The four chapels at the foot of the pagoda are adorned by colossal figures of the sitting Buddha, and in the innermost recess, in a niche of its own, is an even larger figure, the thick gilding darkened in many places by the fumes of thousands of burning tapers and candles Hundreds of Gautamas, large and small, sitting, standing, and reclining, white and black, of alabaster, sun-dried clay, or wood, surround and are propped up on the larger images High stone altars for the offering of rice and flowers stand before the lions, interspersed with niche altars for burnt offerings On the outer edge of the platform are a host of small pagodas, each with its *hti*, *tazaungs*, image-houses overflowing with the gifts of generations of pilgrims (twelve of these *tazaungs*, valued at £150,000 were utterly destroyed by fire on 6th March 1931), figures of Buddha in single low stone chapels, tall posts (called *tagundaing*), flaunting from which are long cylindrical streamers of bamboo framework, pasted over with paper or cloth, depicting scenes from sacred history, and often inscribed with pious invocations from the offerer, or surmounted by the sacred *hintha* (Brahminy goose), the emblem of the Talaings, or the *kalaweik*, the crane of the Burmese

Hundreds of bells of all sizes are hung on stout cross-beams, and beside them lie deers' antlers and wooden stakes with which the worshipper strikes them as he passes, and so calls the attention of *nats* and men to his acts of piety The alternative strokes must be struck on the ground, so as to invoke the testimony of the god of the earth

In the N.E. corner, in a gaily-decorated wooden shed, hangs a bell of enormous size, inside which half-a-dozen men can stand It was presented by King Tharrawaddy in 1840, and is said to weigh 42¼ tons It bears a long inscription recounting the merits gained by the monarch who presented it The bell has a curious history After the Second Burmese War the British made an attempt to carry it off to Calcutta as a trophy, but by some mishap it was sunk to the bottom of the river The European engineers failed to raise it The Burmans after some years begged that the sacred bell might be restored to them if they could recover it The petition was granted with scepticism, but they set to work, got it out by lashing bamboos to it and causing it to float, and carried it in triumph to the place where it now hangs.

The traveller should examine the magnificent carving at the head of the Eastern ascent, and that on the canopy of the colossal recumbent figure of Gautama on the Western face of the platform The carving and inlaid glass-work on all four of the chapels attached to the pagoda itself deserve notice the carving over the Eastern chapel being particularly curious, it has been supposed to represent a scene from the life of the Buddha, or from one of the Jatakas, got up in a modern style, illustrative of the capture of the pagoda by the British The British soldiers, with their rifles, and their officers, each holding a telescope to his eye, are clearly recognisable on the highest tier, while on a lower tier the defeated Burmese show little sign of despondency [1]

[1] The remains of three officers and an unnamed soldier, who were killed at the storming of the pagoda in April 1852, and who were buried at the N E corner of the platform, were removed in January 1929, and re-interred with full military honours in the old cantonment cemetery.

At the base of the hill are monasteries embowered in groves of palmyra palms and shady trees, and to the S is a small convent of nuns, not far from a Rest-house built by the King of Siam for pilgrims from his dominions

The platform is never deserted Long after midnight the voice of the worshipper may be heard in the night air chanting his pious aspirations, while on feast days the laughing, joyous crowd of men and maidens in their gay national dress makes the platform of the Shwe Dagon one of the finest sights in the world The visitor can, if he takes an interpreter with him, have his fortune told by one of the numerous *sayas*, or he can buy one of the quaint triangular gongs used by the religious mendicants to attract attention, or supply himself with gold-leaf, prayer-flags, flowers, or specimens of the curious marionettes and other toys which are offered for sale.

Buddhists fix the date of the erection of the Shwe Dagon Pagoda at 588 B C , but state that the site was sacred for cycles before, since the relics of the three preceding Buddhas were found interred when two Talaing brothers, Taphussa and Bhallika, came with eight precious hairs of Gautama to the sacred hill The original pagoda is said to have been only 27 ft high, and to have attained its present height by being repeatedly cased with an outer covering of bricks The shrine has remained unaltered in size and shape since 1564. At all distances it appears imposing and sublime, like the Buddhist religion It looks best, perhaps, on a bright moonlight night, and the traveller is advised to pay a visit to the platform by night as well as by day. The above description comes mainly from Shway Yoe A useful little local guide can be purchased in Rangoon Another guide-book to the pagoda has been prepared by Dr Baker, a former Secretary to the Y M.C A

The **Sule Pagoda** is close to the Strand in the city The regulation as to the removal of footwear applies Among many curious shrines and figures with which the platform is adorned, will be found a representation of the *Sule Nat*, the spirit after whom the pagoda is named, and the legendary guardian of the hill upon which the Shwe Dagon Pagoda is erected

Behind the Ngadatkyi Pagoda, near the Royal Lakes, at Tamwe, on an eminence, an enormous reclining figure of Buddha, called the Shwe Tha Lyaung, monthly attracts thousands, including many Europeans The cavity of each ear could easily accommodate two or three persons

The Rangoon **Monasteries** are very numerous Some are at Kemmendine, near the railway station, and a visit to them may be combined with an inspection of the images of Gautama in process of manufacture hard by, and of *kalagas* in the shops. The *kalaga* is a kind of blanket, usually red, covered with strange figures in appliqué work They make *portières* or hangings There are other large monasteries in Bahan, Wingaba, Godwin Road, and at Pazundaung In 1824 the road from Rangoon to the Shwe Dagon Pagoda was lined with them.

(2) **The Bazars and Indian Shops.**—The bazars are a great institution, large markets, usually the property of the municipality. They are also the great centres

of gossip among the Burmese. A visit should be made to the *municipal bazars* on the Strand Road and at Kemmendine, the *Surati bazar* in China Street and the Scott Bazar in Montgomery Street. At the bazar in Strand Road silks and lacquer can be purchased. The Indian shops are not of special interest A feature of Rangoon that needs mention are the Indian night stalls along the footpaths principally of the bazar quarter, where a great variety of eatables and merchandise are sold The best shops are *Burma House*, 11 Merchant Street, for Burmese curios, *Khaimchand Tejumal*, in Phayre Street, for Burmese, Chinese, and Japanese curios, and for oriental silks, etc., *Goonamal Parasram*, in Scott Market, for Burmese and Indian goods, *Hok Eong & Co*, Phayre Street, for Chinese curios In these shops he will find specimens at reasonable prices, but if he desires the best he should go to Godwin Road for silver or woodwork carving The usual charge for embossed silver bowls is double the weight of the bowl in rupees; but for the finest work prices are higher

(3) **The Rice, Timber, and Oil Works.**—It is well worth while to visit one of the great rice-mills. Those of *Messrs Steel Bros.*, at Kanaungto, are the largest, and permission to visit them can generally be obtained. The Bombay-Burma Trading Corporation's timber-yard at Alone, and saw-mill and timber-depot at Dalla, and the Government timber-depot at Alone, should also be visited. Elephants used to be employed to stack the timber, showing great intelligence, but are used at Moulmein only. They object to dogs. The works of the Burma Oil Co., Ltd. (1871), are at Dunnedaw and Syriam.

(4) **The Public Buildings.**—Rangoon can boast of many fine public buildings The **Post Office**, the **Currency Buildings**, and the **Sailors' Home** are on the Strand, the **Telegraph Office** is at the corner of Dalhousie and Phayre Streets, the **High Court**, formerly in Fytche Square, faces the water front. The Corporation building is in Dalhousie Street at the junction of which with Barr Street is a statue of Maha Bandula (1942).

E of the business quarter is the **Secretariat**, the Government Press and Council Chamber In front will be noticed the "**Services Memorial**"—a drinking fountain erected by members of the various Civil Services of Burma in memory of their comrades who were killed or died during the Third Burmese War

Near the **Railway Station** at the junction of King George's and King Edward's Avenues, is an obelisk erected as a memorial to those who fell in the Great War (1914-18). The very handsome **Roman Catholic Cathedral** is at the corner of Montgomery Street and Sparks Street, close to the Secretariat Buildings.

N.W. of the old Cantonment, in well-wooded grounds, is **Government House**—a large three-storeyed building.

The **High School**, including a School of Fine Arts, and the **General Hospital**, are situated on either side of Commissioner's Road, and near to them is the Anglican Cathedral. The Diocese was founded in 1877. Visitors interested in the progress of education in the E. would do well to pay a visit to the School, to the Judson College, and also to **St John's** (*S.P.G.*), on Mission Road and St John's Road; **St Paul's**

(Roman Catholic), in Bigandet Street, and the **Baptist Institutions** at Alone

Bernard Free Library, in the compound of the High School, contains an interesting collection of ancient Pali, Burmese, Talaing, and Sanskrit palm-leaf manuscripts The **Phayre Museum** was close to the Bernard Library, but has been removed to make room for the new General Hospital, and housed in a room of the Secretariat offices pending the construction of a special building, admission to it is obtained by special permission of the Commissioner of Pegu. The **Dufferin Hospital** is in Mission Road, close to St. John's College

In the N E corner of the old Parade Ground is the **Jubilee Hall**, erected to commemorate the Jubilee of Queen Victoria The hall serves as a theatre, and is used for public meetings and for recreation purposes An enormous Chin Tsongi "Palace" is the H.Q of the Burma-Chinese Buddhist Society

At the **Jail** on Commissioner's Road many industries are conducted by the prisoners, and in the jail saleroom specimens of their handicraft may be purchased, including excellent carvings and furniture.

(5) The **Rangoon University** (incorporated in 1920) is unique in the East. It is housed on an estate of 400 acres in **Prome** Road, about 5 m. from the centre of the city, on the margin of the Victoria Lake The buildings form quite a town in themselves and the Convocation Hall and smaller Library are of some artistic merit

(6) **The Parks, Gardens, Zoo, and Lakes**—These afford pretty rides and drives, and an excellent service of taxi-cabs and motor-omnibuses places the whole of them within easy reach of the visitor. He should take one drive in the old Cantonment, along Godwin Road, past the old Parade Ground (with the grave of the last King of Delhi) and Race-course (now at Kyaikasan), then to the left past the Pegu Club, to the Prome Road, then along Prome Road to Halpin Road (the "Ladies' Mile"), along Halpin Road to the Gymkhana, thence past Government House along Alone Road to the Great Pagoda, and thence through the Cantonment gardens and back by Voyle Road to the town.

Another drive which should on no account be omitted starts from the railway station, passing Northward through the Victoria Memorial Park, opened by King George V then Prince of Wales, on 13th January 1906 On the way is the *Zoo*, a great attraction to the Burmese The Reptiliary must be seen

A road circles round the **Royal Lakes**, the banks of which are planted with flowering shrubs. On the N. of the Lakes, the picturesque **Dalhousie Park**, which was dedicated to the public use by the Governor-General of that name, makes a favourite promenade with a bandstand on a spit of land jutting out from the N. A statue has been erected at the entrance to the Park as a memorial of King Edward. The view of the Shwe Dagon Pagoda across the water is very striking, the effect being particularly fine when the sun is setting behind it. The Boat Club (private) is just opposite on the S. shore. The **Rangoon Club-house** is close by. The road continues back to the city.

Those prepared to go farther afield can obtain a very pretty

drive by taking the Prome Road to the University, turning E by University Avenue to the **Victoria Lake** (Swimming Club), skirting the lake and returning by the Kokine Road (total distance about 15 m.), or driving by Goodwin Road round the Race-course at Kyaikasan They will pass through miles of pineapple gardens

Another drive is along the Prome Road to the 13th mile, thence to the E along the Mingaladon Road, past the very pretty Mingaladon Golf-course and Club-house to the Rangoon Insein Road at Insein (where there is an Engineering College), by which the return to the city is made total distance about 28 m

(7) **Syriam** —The visitor with an afternoon to spare may well spend it at Syriam, which can be reached from Rangoon by ferry Syriam was formerly a place of some importance, and is of special interest as being the site of the earliest European settlements of any importance in Burma The town is said to have been established in 787 A D , but its history is to be found in the Introduction (p 676) Nothing now remains except the substantial ruins of an old Church, some tombs, and the foundations of a few masonry houses The Church was built by Monseigneur Nerini, the second vicar-apostolic of Ava and Pegu, in the early part of the 18th century In 1756 the bishop was murdered by Alompra From that year until 1760 the mission remained deserted, and was then removed to Rangoon The ruined Church is now buried in the jungle about ½ m from the landing-stage, and is a "protected monument" If the visitor is accompanied by an interpreter, he will have no difficulty in finding some one in the village to show him the way

Syriam was selected by the Burma Oil Company (1871) as the site of their oil refineries, and is now a town Six m. from Syriam is the Kyaikkauk **Pagoda** standing on a hill, which affords a fine view This is a prominent landmark in approaching Rangoon from the sea.

The Rangoon River accommodates vessels drawing up to 28 feet The Port dates from 1852 and Commissioners have functioned since 1880. In 1914 they completed a great training bank on the Dalla side, and the King's Bank was completed in 1927 There is a well-staffed Pilot Service There is a floating landing-stage, whereas formerly steamers were moored in the stream above the Hastings Shoal at the confluence of the Pegu River At Monkey Point is the shore base of British Overseas Airways (flying-boats)

ROUTE 1.

Rangoon to Pegu, Mandalay, Sagaing, Myitkyina and Bhamo, returning to Rangoon by rail or river, *viâ* Prome

If the visitor has only a few days to spare he should proceed to *Mandalay* by rail, spend two days there, and return by the same route to Rangoon If he has a week at his disposal he may proceed to Mandalay by rail, stopping between trains at *Pegu*, return by steamer to *Prome*, and thence by rail to Rangoon To the visitor with leisure the voyage (a week) in the comfortable Irawadi steamers (office, 50 Phayre Street, Rangoon) may be recommended

In three weeks he can extend his tour to *Bhamo*, and in a longer period go on to the first defile and break the return journey at *Nyaungu* for *Pagan*, and at *Yenangyaung* for the *oil wells* Pagan and Yenangyaung can be easily managed, as they are near the river-bank, but a visit to either place will involve small special arrangements

The railway has a road running along it all the way to Mandalay. There are two good trains from Rangoon to Mandalay By leaving by a slower train some hours earlier time will be available to see **Pegu.**

The railway to Prome was opened in 1877 and to Mandalay in 1889, both built by the State. A company took them over in 1896, but the State reacquired them in 1926

47 m **PEGU** junction (R, two D Bs · a Club, open to visitors; motor service, 7 m, to Thanatpin, where snipe and duck shooting is obtainable) is said to have been founded in 573 A D by emigrants from Thaton, and was once the capital of the Talaing kingdom It is described by European travellers of the 16th century as of great size, strength, and magnificence It was destroyed by Alompra (1757) but rebuilt under Bodawpaya It is interesting on account of its pagodas and a colossal figure of Gautama

The **Shwehmawdaw** (Golden Great God) **Pagoda**, E of the railway station, is said to contain two hairs of Buddha Successive Kings of Burma and Pegu lavished their treasures on it in repairing and enlarging it from 75 ft. high to 288 ft high and about 1350 ft in circumference at the base It was repaired by Bodawpaya before 1819 and subsequently regilt under the supervision of the local elders It stands on a polygonal base and becomes hexagonal Very extensive damage was caused by an earthquake in March 1931, which also occasioned serious loss of life

The Shweaungyo Pagoda is situated at the centre of the E wall of the city At about 700 yards from the S face is Jetuvati the encampment of Alompra when he beleaguered the town in 1757 A D. Within the walls are visible the sites of the Palaces of the Kings of Hanthawaddy Traces of a double wall and moat may also be seen Outside the N E. corner of

the walls is rising ground, the site of the ancient city of Hanthawaddy

The enormous recumbent figure of Gautama, known as the **Shwethalyaung**, is about 1 m to the W. of the railway station It is 181 ft. long and 46 ft high at the shoulder According to the Burmese histories it was built by Migadeikpa Min-ngè in 994 A D After Pegu was taken by Alompra and utterly destroyed all remembrance of this gigantic image was lost The place on which it was situated had become dense jungle, and the image itself turned into what appeared to be a jungle-covered hillock In 1881 the railway was being constructed, and laterite was required for the permanent way A contractor found a quantity in the jungle, and on clearing the site uncovered the image, which has become an object of deep veneration It has been completely restored, and a lofty pavilion has been erected over it The "Pillars of Victory" in the District Court Compound should be seen

Just before reaching the Shwethalyaung is seen the **Kalyanisima** or ancient Hall of Ordination in the Zaing-ganaing quarter, founded by King Dhammacheti in 1476 A D, with ten large stones covered with Pali and Talaing inscriptions ½ m. W of the Shwethalyaung is the **Mahazedi** —a pagoda built by King Hanthawadi Sinbyuyin about the middle of the 16th century It was destroyed by Alompra, but the remains are 170 ft high It has been restored 1 m S of the Mahazedi is the **Shwegugale Pagoda**, with sixty-four images of Buddha constructed by Siamese architects About 2 m down the Rangoon Road lies the **Kyaikpun** pagoda, with four colossal figures, each about 90 ft. high, seated back to back These represent Buddha and his three predecessors.

The golf-course at Pegu is situated on a rising ground to the N E of the city, outside the wall A view can be obtained of the Shwehmawdaw and other pagodas and the surrounding country Big-game shooting in the hills to the West duck-shooting at Pyinbongyi, 20 m N of Pegu

From Pegu a line, 123 m (opened 1907) runs through Kyaikto and Thaton to Martaban opposite Moulmein (p 709) Another branch runs S to Thongwa (47 m).

The fast trains to Mandalay pass through the **Toungoo** District of Lower Burma during the night, and in the early hours cross the British frontier of 1852 into the Upper Burma District of Yamèthin From **Toungoo** (166 m from Rangoon) a motor service runs 28 m to the hill station of **Thandaung** (4300 ft above the sea, D B and Circuit House) A branch from this road leads to the Mawchi mines near the Salween River

At 226 m **Pyinmana** junction for a line N W to Taungwingzi (67 m), and Kyaukpadaung (138 m) There is a Forest College here Between Pyinmana and Yamèthin is seen to the E the fringe of the mass of hills which form the Shan States

275 m **Yamèthin**, headquarters of the District, with large railway workshops

306 m **Thazi** junction for a branch to the W running to Meiktila (14 m), Myingyan (70 m) and then N E. (69 m) to Palaik on the line to Mandalay (12 m from that place). A road runs W to the oil fields

The S Shan States branch, opened 1915, runs East from Thazi, climbs to the plateau with several zig-zags to Kalaw (63 m), and runs on over a treeless plain

to descend again to Shwen-Yaung (98 m.), near the Inle Lake.

Kalaw (4292 ft., D.B. and hotel) is a popular summer resort. There is a daily motor service, 22 m., from the railway station at Heho to Taung-gyi. Visitors to Taung-gyi will save much time by leaving the train at Heho and proceeding by motor-car or lorry. There is a good road from Thazi junction to Kalaw and Taung-gyi.

Taung-gyi (D.B.), the headquarters of the Shan States Federation under the control of the Governor at an altitude of 4712 ft.

At 360 m **Kyauksè** (R. and D.B. and Circuit House). Here the S. Shan hills approach closer to the railway. There is an elephant procession at an important festival in October. The **Shwethalyaung Pagoda** on the top of the hill overlooking the railway station was built by King Anawrat'a about 1028 A.D. Many old pagodas and remains of old cities are scattered throughout the District. Shans, with pack bullocks, visit Myittha, about 12 m. S. of Kyaukse, and considerable trade still comes through from the S. Shan States. Big game is found in the hills; there are good snipe grounds in the Kyauksè district. The District contains the most complete example of Burmese irrigation works. The main lines of the original system (11th century) have been preserved. The cultivator can obtain two crops of rice and sometimes three or four crops (not all rice) annually from the same ground.

376 m. the Myitnge River is crossed, running to Ava and, passing through Amarapura (p. 699), the train reaches

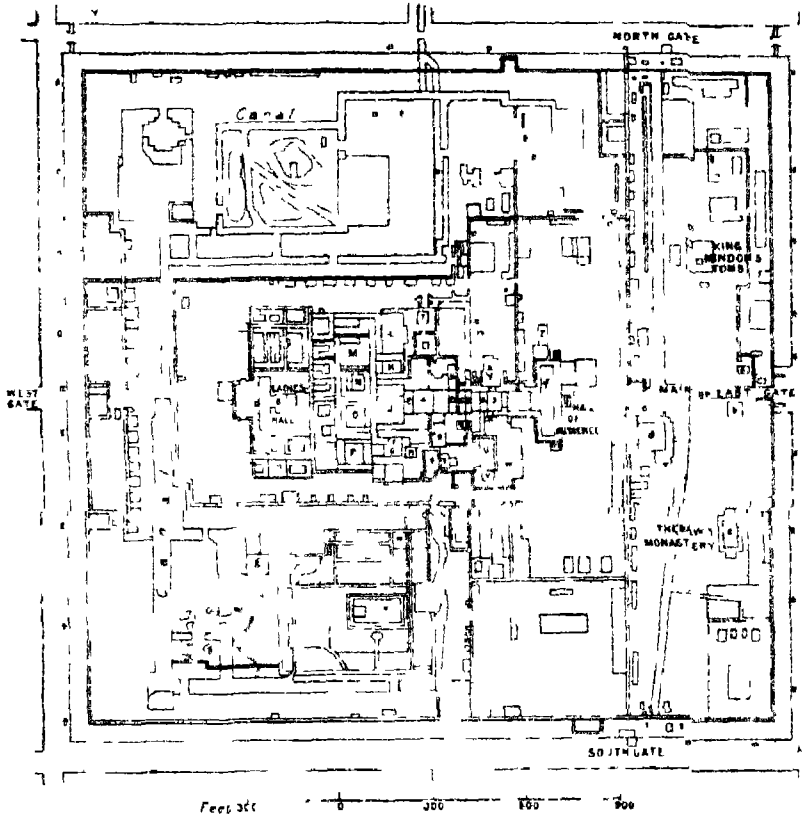
386 m. **MANDALAY** * or Mundapa station (altitude 248 ft., D.B.). Visitors can take their meals at the Ry. Stn. Mandalay,[1] founded by Mindon Min (1857), was from 1860 until 1885 the capital of the Burmese kingdom and the residence of the King. Eighty-five per cent. was destroyed in 1942-1945 during the War. The city proper was in Burmese times within the walled enclosure, called *Fort Dufferin*. It was retaken on 21st March 1945.

The ascent should first be made of **Mandalay Hill** (774 ft.)—an isolated mound rising abruptly near the N.E. corner of the fort. From this point can be seen the town, the fort with the Palace in the centre, the temples and monuments worthy of a royal city, and the system of irrigation built by King Mindon. At the summit of the hill was formerly a wooden temple containing a huge standing figure pointing with his finger at the Palace beneath. This temple and the figure were destroyed by fire after 1885, and the temple has been rebuilt. A building has been erected on the Southern spur of the hill to contain Buddha relics sent over from India.

Fort Dufferin next claims attention. This great square, built to guard the inner city and Palace, with sides 1¼ m. long, is enclosed by walls of red brick 26 ft. high,

[1] The little work, *Archæological Notes on Mandalay*, by Taw Sein Ko, I.S.O., Superintendent, Archæological Survey, Burma (1917), contains a scheme for three days' sight-seeing at Mandalay and Amarapura. See also *Guide to the Palace, 1905*, by Duroiselle.

THE PALACE, MANDALAY.



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Zetawun Figures of the royal ancestors were kept here

The King held his morning levee It is an open passage between two rooms in the Western of which, D, the King was seated with his attendants

The Glass Palace The Western half is one large room The Water feast Throne stands at the West side of the room

Nursery

Daily attendance room for Queens

King and Queen's special living room

Kitut of drawing room where the court met to witness theatrical displays in the theatre on the south side The stage is now cleared away

Originally the Queen's room Thibaw eldest child was born here, but Supaya Lat never regularly inhabited it

Tabanduing House

Selndon House residence of Dowager Queen

Northern Palace
Western
Southern
houses made over to inferior Queens in King Mindon's time, in Thibaw's to Princesses

The road running down the centre East and West was called the Samok Road, and led to a courtyard called Samok in the centre of which stood the Lily Throne The houses on the North and South of this courtyard were inhabited by inferior Queens in King Mindon's time and by Princesses in King Thibaw's

King's private Treasury

Quarters of personal Bodyguard

An evening sitting room,

Privy Council Chamber

Observatory Tower Favourite resort of Supaya Lat, here she watched the British troops enter Mandalay

New house built for, but never used by, the white elephant

Cut up into various small rooms

Byedaik, or Treasury Office where Atwin Wuns or Privy Councillors sat

House for Pwes The open space east of Z was used for races and various sports on horseback

Clock Tower, where gong and drum sounded the watches

Also a high tower in which a tooth of Gautama Buddha was enshrined

King Mindon's Tomb

Hlutaw or Supreme Council Hall (demolished), and Lion Throne moved to Calcutta Museum

Richly decorated Monastery on the site of which King Thibaw spent the period of his priesthood

Golden Spire over Great Audience Hall

The South Garden Palace, a kind of picnic house for Thibaw In the front veranda he was taken prisoner by Col Sladen in November 1885

Lion Throne, under spire in Great Audience Hall

Goose Throne in Ancestral Hall

Elephant Throne in the Byedaik

Bee Throne in the Glass Palace

Conch Throne, in the Morning Levee Hall

Deer Throne in the South Hall

Peacock Throne in the North Hall

Lily Throne, in Ladies Hall

machicolated at the top. They are backed by a mound of earth, so that defenders can look over them On each of the four sides stand, at equal distances, thirteen peculiar and elegant watch-towers of Burman design, built of teak and freely ornamented with gold One on the N. side, enclosed and enlarged, formed the nucleus of **Government House**, the residence of the Governor when at Mandalay (destroyed).

Surrounding the fort, a broad Moat full of water, 75 yards wide, is crossed by five wooden bridges, one in the middle of each side, and an extra one on the W face which was formerly reserved for funeral processions. On this moat in the King's time were several state barges, gilt from stem to stern, some of them propelled by as many as sixty rowers. Water hyacinth chokes the moat now

There are twelve gates through the fort wall, three on each side, equally spaced In front of each gate stand a masonry curtain and a massive teak post bearing the name and sign of the gate, each of which is guarded by the stone image of a guardian *nat* placed in a brick shrine. The old Burmese custom of burying alive human victims at the gates of a new city was not, as is sometimes stated, followed here. By King Mindon's order jars of oil were buried instead, and images of guardian spirits were set up in shrines.

The interior has suffered by fire and war damage. Exactly in the centre of the fort stood the royal Palace or *Nandaw*, brought here in the main from Amarapura. A plan (p. 694) is reproduced by permission.

The Palace was formerly defended by an outer palisade of teak posts 20 ft. high and an inner brick wall, with an open esplanade of about 60 ft. width between them This walled square was cut up into numerous courts surrounded by high walls. N. and S of the Palace enclosure are two walled-in gardens, containing royal pavilions, and laid out with canals, artificial lakes, and grottoes. The outer stockade, except in a few places, and all the brick walls were removed in a restoration of 1906, as also many of the minor structures

Four strongly-guarded gates led through the outer defences The large gates were only opened for the King; all other people had to squeeze through the red postern at the side of the Eastern gate in front of the Palace, which obliged them to bow low as they drew near the royal precincts

Upon entering this gate, a wide enclosure was crossed, which contained a number of subsidiary buildings—such as the armoury, printing-press, mint, quarters for servants and guard, the royal monastery, King Mindon's mausoleum, and the offices of a few of the highest officials.

Beyond was another spacious court in front of the Palace, at the Northern end of which races and sports used to take place before the King. In the centre of this court stands the great Hall of Audience, with the lion throne (now removed to Calcutta Museum), projecting out boldly from the face of the Palace. The hall is 250 ft across from wing to wing, but only 45 ft. deep. S W of it, at the back, was the stable where the Sacred White Elephant was lodged.

The private part was behind on an oblong platform in an inner enclosure, which was entered through two jealously-guarded

gates on each side of the Hall of Audience At the Western end of the Palace platform is a private Audience Hall, with the lily throne, where ladies were received, and between the two Halls of Audience were numerous wooden pavilions, formerly occupied by the various Queens and Princesses Over the lion throne rose the high seven-storeyed teak umbrella roof and gilded spire or *shwepyathat*, the external emblem of royalty A Museum was founded in 1905 on the platform

In the S garden there was once a small pavilion, on the veranda of which King Thibaw surrendered to General Sir Harry Prendergast and Colonel Sladen on 29th November 1885 At the S E corner of the Palace platform was a lofty wooden tower from which the King used to view the city The richly-carved Pongyi Kyaung to the E of the Palace, where King Thibaw passed the period of priesthood, is worthy of notice. Hard by is King Mindon's mausoleum, a brick and plaster structure, consisting of a square chamber surmounted by a seven-storeyed spire Mindon Min was buried here in 1878 The Palace buildings were for a time used for barracks and offices, but they were found unhealthy The Hall of Audience was used by the military as a Church The Lily Throne Hall and surrounding buildings for some years afforded accommodation to the Upper Burma Club, but this was discontinued in the viceroyalty of Lord Curzon, who feared the risk from fire to this absolutely unique example of the old Burmese Palace built according to the traditional pattern. Experience in Ava and Amarapura shows that Burmese buildings perish in fifty to sixty years when at all neglected

Pagodas and Monasteries —The whole neighbourhood of Mandalay, Amarapura, and Ava is rich with splendid fanes. Some of the finest, including the *Atu-ma-shi*, or "incomparable" monastery, have been burnt, but the "**730 pagodas**" S E of the Mandalay Hill (Kuthodaw) should be visited, as also the **Queen's Golden Monastery** in A Road and the **Arakan Pagoda**

Facing the E gate of the Palace is the Taik Taw Monastery of the Buddhist Archbishop, decorated with wonderful dragons N of it, at the S E corner of Mandalay Hill, is the Kuthodaw or **730 Pagodas** — a remarkable work. King Thibaw's father, anxious that the holy books of Buddhism should be recorded in an enduring form, called together the most learned of the priests to transcribe the purest version of the scriptures; thus he caused to be engraved on 729 large stones of the same pattern These stones were set up in an enclosed square and over each was erected a small domed building to preserve it from the weather The enclosure is about ½ m square, surrounded by a high wall with ornamental gates, in the centre stands the "730th pagoda a temple of the usual form. W. of this on the road to Mandalay Hill is the Kyauk Taw Gyi Pagoda, built over a huge monolithic image of Buddha

The **Glass Monastery**, so called from the profusion of inlaid glass work decoration, was close by It has been burnt down, but close to the remains of the Atu-mashi Kyaung, which was situated S of the Kuthodaw Pagoda, there is the **Shwenandaw Kyaung**, which is worth seeing It is so called because the materials for the building were obtained by dismantling the apartment occupied by King Mindon Min just before his death The sanctuary is adorned with magnificent carvings

The **Queen's Golden Monastery**, built by Supaya Lat, in A. Road near the railway to Mandalay shore, is built of teak in the ordinary form, but is profusely decorated with elaborate carving, and is heavily gilded within and without Owing to the question of wearing shoes, permission to inspect the interior of this monastery is not ordinarily given, but it can be obtained

On B Road is the gilded Eindawya Pagoda, and not far from this was a picturesque structure known as the Serpent Pagoda, which was burnt down

S W of the city is *Maha Muni*, or "**Arakan Pagoda**," rendered especially sacred by the great sitting image of Gautama there preserved, and on this account regarded by Upper Burmans as not inferior in sanctity to the Shwe Dagon itself The huge brass image, 12 ft in height was brought over the hills from Akyab in 1784. The image was originally set up, so says Shway Yoe, quoting the ancient legend, during the lifetime of the Great Master The utmost skill and most persistent energy had failed in fitting the parts together, till the Buddha, perceiving from afar what was going on, and ever full of pity, came himself to the spot, and embracing the image seven times, so joined together the fragments that the most sceptical eye cannot detect the points of junction So like was the image, and so sublime the effulgence which shone around during the manifestation, that the reverently-gazing crowd could not determine which was the model and which was the Master The image is covered by a great seven-roofed *pyathat* with goodly pillars, the ceiling gorgeous with mosaics Long colonnades, supported on 252 massive pillars, all richly gilt and carved with frescoed roof and sides, lead up to it All day long circles of constantly-renewed worshippers chant aloud the praises of the Buddha, and the air is thick with the fume of candles and the odours from thousands of smouldering incense-sticks Within the precincts of the pagoda is a large tank tenanted by sacred turtle. The relic casket discovered at Peshawar (p 376) is in the Treasure-house of this pagoda

The **great Zegyo bazar** lies near the centre of the city The M G railway runs through it to Madaya, 17 m N.[1] Grain and vegetable vendors, silversmiths, toy, umbrella, and lacquer makers, silk merchants and numerous other traders occupy streets of stalls Burmese ladies in the usual tight-fitting petticoat of gay silk and white jacket, attended by a maid, may be seen making their daily household purchases, groups of girls, with flowers in their hair and huge cigars in their mouths, price the best silks in Burma Nowhere else can be seen gathered together so many widely-separated tribes — Chins from the western mountains, Shans from the E., Kachins from the N, Chinese from the little-known inland borders, Sikhs, Gurkhas, Madrassis, and other Indians N of the bazar is the Diamond Jubilee Clock Tower

Excursions from Mandalay.

Short excursions may be made to **Yankintaung**, to **Amarapura** to **Ava** and **Sagaing**, and to **Mingun**.

The hills called **Yankintaung** are about 5 m due E. from Mandalay,

[1] Complete rebuilding will be required.

There are several pagodas and monasteries, and a deep fissure in the ground containing an image of Gautama

Amarapura, the Immortal city, founded in 1783, the capital till 1859, with an interval of 1822-1837, lies 6½ m S Only ruins now remain, but they are well worth a visit Near the tower of the Palace there was a monster gun, removed to Mandalay, the principal sights are the Shinbin-kugyi and Patodawgyi pagodas, within the precincts of which there is a collection of Burmese inscriptions collected from various parts of the country by King Bodawpaya (ruled 1776-1819),[1] and a colossal image of Buddha (p 714) on the shore of the S lake The Kyantawgyi Pagoda is approached by a bridge nearly a mile long The Station-master may provide a local guide Near the station is a fine Chinese Temple At the Government silk-weaving works "Mandalay silks" may be bought

The ruined city of **Ava** is on the left bank of the Irawadi, and **Sagaing**, a typical Burmese town, is nearly opposite The two places were the capitals of Burma from 1636 to 1837, with short intervals A great railway and road bridge, 5894 ft long, has nine spans, 350 ft (1934) The wells on which the piers are founded were sunk to 126 ft below low water From Sagaing a branch line runs W to (79 m.) Monywa on the river Chindwin (see p 716) and N (136 m) to Ye-u

Little trace remains of the past glories of Sagaing and Ava, but on both sides of the river are hundreds of pagodas of every variety and degree of decoration, such as the *Nagayon paya*, the whole building wrought into the form of a dragon, and the huge round-domed *Kaunghmudaw*, built in 1636

Sagaing (D B) was the refuge (1660) of the last of the Ming dynasty of China, Kung-li

The last of the excursions near Mandalay deserving special mention is that to **Mingun**, about 9 m. above Mandalay, by local steamers Mingun is interesting for its great unfinished pagoda and for its huge bell

The base of the great misshapen Mantara Gyi Pagoda covers a square of 450 ft, and its height is 155 ft, about one-third of the elevation intended, but Bodawpaya, who attempted to break the Buddhist record of putting up the most gigantic monument, did not complete it because a prophecy ran that its completion would portend disaster to his dynasty In 1838 an earthquake rent the gigantic cube, the largest mass of brickwork in the world and cast down great masses Overlooking the river, in front of the Eastern face of the temple, two gigantic leogryphs in brick, originally 95 ft high, with white marble eyeballs measuring 13 ft in circumference, are in ruins

N of the temple, on a low terrace, stands the largest bell in Burma—the largest in the world, probably, after the one at Moscow —which was cast in 1735, weighs 176 tons, is 24 ft. high, and the clapper weighs 7 tons It too fell in a fire The original supports were destroyed by the earthquake of 1838, and it rested on the ground till 1896, when it was slung on an iron beam resting on

[1] Bird's *Wanderings in Burma* contains many details of these

two iron pillars, under an ornamental shed. The dimensions of the bell are as follows :—

External diameter at the lip	16 ft. 3 in
Internal diameter at the lip	10 ft
Internal diameter above the lip	4 ft 8 in
Exterior height	12 ft 6 in
Interior height	11 ft
Interior diameter at top	8 ft 6 in

The thickness of the metal varies from 6 in to 12 in, and the actual weight is roughly, 87 tons There are other curious pagodas one of which has five concentric processional paths

Mandalay to Maymyo and Lashio by Rail

The railway line, opened to Maymyo in 1900, and throughout in 1903, from Mandalay to Lashio (181 m.), in the N Shan States, makes it possible to visit **Maymyo** and the **Gokteik Viaduct**

Maymyo (43 m., D.B.) is connected also by a motor road (2-hrs journey), and most people travel this way The town stands 3538 ft above the sea, and is the hill station of the Government of Burma It lies in a trough between low, wooded hills There is a "week" in October

At Gokteik (83 m. from Mandalay) is a wonderful steel trestle-bridge, 2260 ft long, built 320 ft high on a natural bridge of limestone rock 550 ft high, with a great cavern under it. The bridge was made by the Pennsylvania Co. in America, and was pût up (1901) by American workmen. There are Rest-houses belonging to the railway (application to be made to Stn Master, Maymyo). On previous advice being given to the butler in charge, arrangements will be made for providing meals. It is worth while descending the 900 ft. by a zig-zag path to the cavern, through which the river flows under the two bridges, *i.e.*, the natural limestone bridge and the viaduct built on it. The road crosses 3 m N.

Beyond Gokteik is Hsipaw, 130 m from Mandalay Here the Shans predominate, ruled by several Sawbhas At 158 m the Mansam Falls are passed, where the Burma Corporation have an electric installation for working their large mining areas at Bawdwin (silver and lead). The Namhan silver mines are 31 m. S (road from Hsipaw) in the Tawnpeng State At Nam Yao, 168 m., is a N G branch (not open for public traffic) for Namtu smelting plant

The main line ends at **Lashio**, the headquarters of the N Shan States, guarded by Burma Military Police. The "Burma Road" to China begins here, 116 m to the Frontier The cherry-tree blossom here in Jany and Feby is very pretty, and the market, which is attended by various Hill Tribes and Shans, is worth seeing

Taxis are available for excursions (1) Namhkan, connected by road to Bhamo (68 m.) due N., on the Chinese border, within a day (2) Tangyan, 87 m S.E leads to a ridge overlooking the Salween Beyond is Tamanhsum Ferry. (3) Mongyai in the S Hsenwi State, 56 m. S., is a starting-point for visiting the S Shan States *en route* for Taung-gyi and Kalaw (p. 693). (4) Namsawrap (56 m. N.E.), from which a mule track leads to Kunlong Ferry on the Salween. East of the river lie the Wa States, containing a very primitive people. Curios can be picked up almost everywhere on the market days. Shan straw hats and trousers are peculiar.

Mandalay to Bhamo and Myitkyina

The visitor who has time to proceed farther N beyond Mandalay may either take one of the Irawadi Flotilla express steamers or he may travel by the train, over the Mu Valley railway, opened 1894-8, to **Myitkyina**, 729 m from Rangoon, passing through Shwebo (451 m), Naba junction (596 m), and Mogaung (692 m). The railway journey from Mandalay to Myitkyina by rail takes about 22½ hours. Shwebo is an old Burmese capital, 38 m by road from Sagaing and Ye-u (p 699) is 25 m N.W. If it is desired to visit Bhamo, the train must be taken to Naba Junction whence there is a road (18 m) to Katha on the river-bank, and here the steamer for Bhamo (p 702) can be caught.

About 2 hrs before reaching Myitkyina by rail, **Mogaung** is passed. Thus is the starting-point of a bridle-path to the *Jade Mines* 80 m to the N.W.

Myitkyina is on the west bank of the Irawadi which in the dry months here runs clear as crystal and contains many sporting fish, near the confluence of the Mali and Nonai Hka tributaries. To the E high mountain ranges divide the District from China, the nearest point on the frontier being about 30 m from Myitkyina as the crow flies. A fairly good bridle-track connects Waingmaw on the east bank of the Irawadi with Kunming in China. There is a large air port here on the India-China run.

Many types of hill peoples may be seen in the bazar at Myitkyina. The bulk of the population consists of Kachins, whose homes are in the hills, the plains are gradually attracting settlers. The climate at Myitkyina from the middle of November till the end of February is delightful, and English flowers, fruit, and vegetables thrive.

The P.W.D. Inspection Bungalow is available when not required by officials, but visitors must find their own food.

By Steamer

The steamer from Mandalay to Bhamo and back (2½ days up and 2 days down) is recommended. Passing Singu on the right and Sheinmaga and Kyaukmyaung (75 m from Mandalay) on the left, the steamer passes *through the third defile to* Thabeikkyin and Kyanhnyat. Tigyaing, on the east bank is prettily situated on a hill. Katha is next passed on the left. The pagodas of Shwegu (55 m from Bhamo) next come into sight on the right, others on Royal Island in the river, and the steamer then passes through the second defile bending east to Bhamo.

The first defile is above Bhamo, a gloomy gorge 35 m in length to Sinbo through which steamers do not go, and launches only in the dry season. The defiles of the river are very fine. The second defile is one of the great spectacles of the world. The wide stream narrows to 1000 yds, and flows for 30 m. through a chain of hills covered with splendid foliage. The successive reaches of the river resemble lakes, being apparently shut in all round. Beyond the first hills is a plain, and then the second defile through another chain of hills, which is even finer than the last. The river narrows to 200 or

300 yds, and rushes through the gap except at low water. This defile extends for 5 m., and in the centre the towering Elephant Rock, crowned by a golden pagoda, rises straight out of the water to a height of nearly 400 ft. In spite of this narrow approach, the steamer service to Bhamo is maintained at all times of the year, starting, however, on different days.

Bhamo on the east bank (populated by Burmans, Shans, Chinamen, Kachins, Indians, and every sort of intermixture) is the starting-point of the main trade-route into China, the nearest point Naupra on the frontier being only 30 m. distant. Business is largely in the hands of Chinese, and the transport is by mule caravans. There is a W. B. and a Circuit House, but visitors may remain on board the steamer. The Theindawgyi Pagoda resembles those of Siam in shape, and a Chinese Joss-house will be interesting to those who have not seen the farther East.

Just outside Bhamo was the old city of San-pa-na-go, portions of the walls still remain. This is probably the place referred to in Fra Mauro's map as the place where "goods are transferred from river to river and so pass on to Cathay."

The District is inhabited by Kachins, no longer wild hillmen, who in Burmese times were independent, and were a constant source of terror to the caravans passing between Bhamo and China. A metalled road runs via [illegible] to join the Lashio-Kunming road.

Bhamo back to Mandalay

In order to visit the *Ruby Mines* on the return journey by steamer, it will be necessary to break the journey at Thabeikkyin, in the Katha District (115 m. from Mandalay). A good road connects Thabeikkyin with **Mogok** (60 m. E.), but the journey is hardly worth undertaking. The road passes through fine mountain scenery, and the journey can be broken at D.Bs. at intervals of 12 m. Fifty m. from Thabeikkyin the road crosses a pass 5000 ft. high and descends into the Mogok Valley, which forms a cup in the hills about 10 m. long by 2 m. broad. The mines are worked by a number of licensees, who work by hand and primitive methods. The Ruby Mines Company has ceased working. Other precious stones, both uncut and polished, are found.

Within easy access from Mogok or Thabeikkyin (D.B. at each, with caretakers and food) there is good big-game shooting—leopards, tigers, elephants, *saing* bison, and *sambhar*, but the country is difficult and, during the rains, malarious.

About 50 m. above Thabeikkyin Tagaung is reached on the bank of the Irawadi, one of the oldest and most important capitals of Burma sometimes spoken of as old Pagan. As Tagaung ceased to have any importance some hundreds of years ago, there are no ruins to be found, though the mounds in the marshes near it may in the future yield important results.

Mandalay to Prome

Having returned to Mandalay,

the visitor may proceed by Flotilla steamer to Prome, stopping at Nyaungu for Pagan, and at Yenangyaung for a visit to the oil-wells. The steamer calls at **Myingyan** and **Pakokku**. Myingyan is the terminus of a branch railway from Thazi (p. 692), and is an important trading centre, especially in cotton. There are soap and oil works. Pakokku is the junction point for the Chindwin River (p. 710) and the Chin Hills.

Nyaungu is situated about 120 m. below Mandalay, on the E. bank of the river, and is the nearest halting place to Pagan, the capital of Burma from the 2nd to the 13th century, where lacquer work can be obtained. The British reached it on 9th February 1825.

There is a small Circuit House at Nyaungu, and a large one at Pagan, near the principal pagodas (permission to occupy from the Deputy-Commissioner, Myingyan). Messing is arranged for at the Pagan Circuit House, which is 5 m. from the steamer landing-place at Nyaungu, and can be reached by bullock cart or country boat. The Mandalay-Prome steamers call daily at Pagan and Nyaungu. The visitor who wishes to make anything like a detailed examination of the remains should arrange to remain at least two days in each.

A description of the pagodas at Pagan will be found in Yule's *Mission to Ava*, in Bird's *Wanderings in Burma*, in Scott O'Connor's *Mandalay and other Cities of the Past of Burma* (Hutchinson, 1907), and in the publications of the Burma Archæological Department. See also Taw Sein Ko's *Guide to Pagan*, and C. M. Enriquez's *Pagan*. A very brief account (taken chiefly from Yule) of some of the principal monuments is all that can be given here.

The **Pagan** ruins extend over a space about 20 m. in length along the river, and averaging about 5 m. in breadth. The brick rampart and fragments of an ancient gateway, showing almost obliterated traces of a highly architectural character, are the only remains which are not of a religious description. It is said that there were nearly 13,000 pagodas and monasteries before Kublai Khan destroyed Pagan (A.D. 1287). The remains of over 5000 can still be traced. All kinds and forms are to be found, the bell-shaped pyramid of brickwork in all its varieties, the same raised over a square or octagonal cell containing an image of Buddha, the bluff knob like dome of the Ceylon dagobas, the fantastic *Bupaya* or Pumpkin Pagoda, and many variations on these types. But the predominant form is that of the cruciform vaulted temple.

One hundred and thirty-six pagodas are under the custody of Government *darwans*, and the more important names of four last Buddhas are kept in repair. The three principal temples are the Ananda, the Thatbyinnyu, and the Gawdawpalin, all close together near the S. side of the city and nearly 5 m. distant from Nyaungu.

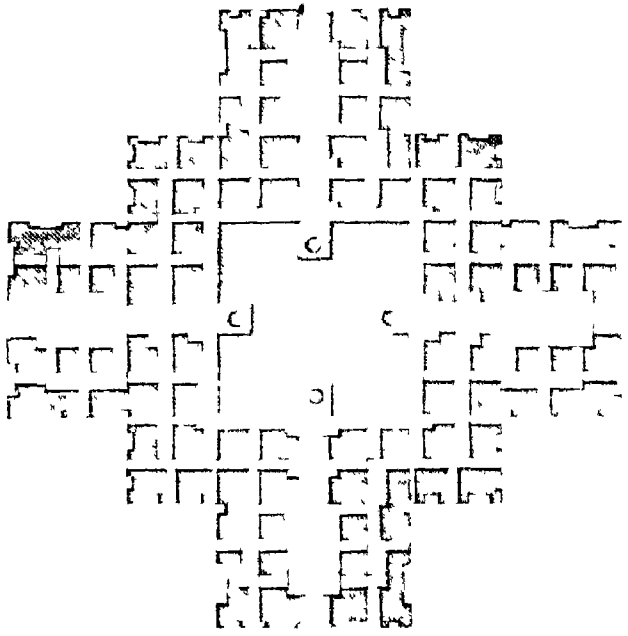
The **Ananda Pagoda** (see plan below) is a square of nearly 200 ft. on each side, with projecting porches on each face, so that it measures 280 ft. [illegible] way. It is seven storeys in

height; six of these are square and flat, each diminishing in extent, so as to give the whole a pyramidal form, the seventh, which is, or simulates, the cell of the temple takes the form of a Hindu or Jain temple the whole in this instance rising to the height of 183 ft

Internally the building is inter

was built *c* A D 1066, in the reign of Kyanzittha The name is either derived from *Ananda*, the favourite pupil of Buddha, or more probably from *nanda*, meaning "admirable" A Museum (1904) is in the enclosure

Next in importance is the Thatbyinnyu (the Omniscient), erected about the year 1100 by



Plan of the Ananda Temple (from Yule) Scale 50 ft to 1 in

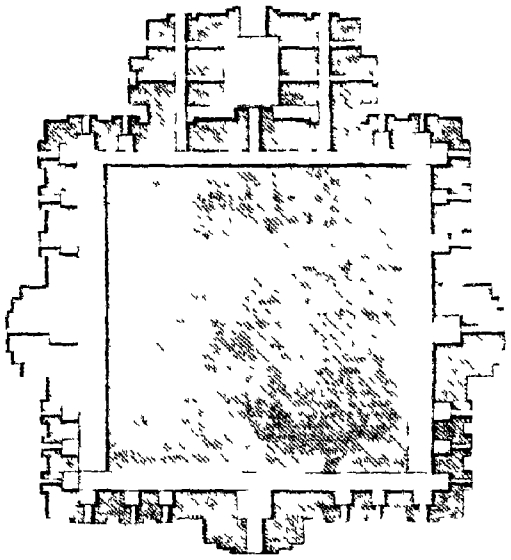
sected on each side by two narrow corridors, but in rear of each projection is a niche in which stands a statue of Buddha more than 30 ft. in height These four great statues represent the four Buddhas who have appeared in the present world period—viz E., Kaukathan W., Kathaba, N., Gautama, and S., Ganugun They are all richly gilt The Ananda

the grandson of Kyanzittha It has one Buddha in the exact centre A third is the Gawdaw palin (Throne of the Ancestral Hall) built in 1200 These two are very similar. The height of the Thatbyinnyu is 201 ft, that of the Gawdawpalin 180 ft They differ from the Ananda in having each only one porch instead of four, and consequently only one great statue in its cell instead of

four standing back to back A plan of the Thatbyinnyu is given below

Another important temple within the city walls known as the *Maha Bodhi*, was erected about 1200 by King Nandaungmya and is different from the other temples The basement is a quadrangular block of no great height supporting a tall spire, strongly resembling the original temple of Buddh Gaya (p 57)

captive Talaing King Manuha was in Anawrata's reign allowed to hold a subordinate court, and which contains representations of Brahma with the triple head, the Mingalazedi, noted for its glazed tiles depicting scenes in the previous existence of Gautama The excavations round the *Pet leik paya* have brought to light a series of Buddhist terra-cotta reliefs The *Pupara* (pumpkin) Pagoda is on the river-bank



Plan of Thatbyinnyu (from Fergusson) Scale 1 in 150

Both base and spire are covered with niches, bearing seated Gautamas and interspersed with ornamental panels and mouldings

Among other temples the more interesting are a monastery in the Ananda containing frescoes, the Manuha Pagoda, which contains a huge reclining image of the Buddha the Nagayon in which the "Nagas" guarding the figure indicate the influence of snake worship on the Buddhism of the period, the Nanpaya, where the The *Sambyaka* is the most beautiful

On the road between Pagan and Nyaungu is the fine **Shwezi-gon Pagoda** near which many workers in lacquer reside

2½ m N of Nyaungu is the **Kyaukku** Pagoda founded A D 849, built in three terraces the hall in the centre of it contains a statue of Buddha which, like the decoration of the temple, is of Indian type

Pagan fell in 1287 A D. The Emperor of China sent a vast army

to avenge the murder of an ambassador The Burmese King pulled down 1000 pagodas, 10,000 smaller ones, and 400 square temples to build additional fortifications from Pahn on the N to Ywatha on the S , but a prophecy found under one of the desecrated shrines robbed him of his courage He fled to Dala on the S and Pagan never recovered its pristine splendour and magnificence

The Irawadi just below Pagan widens out like a gigantic lake to over 2 m in breadth, and the view of the sacred city is particularly fine

Continuing his course down stream the visitor will pass Salem yo **Chouk**, for the oil-fields, or continue to **Yenangyaung** on the E bank The oil-field is situated about 3 m from the river-bank Oil winning by primitive Burmese methods is still practised but since 1886 several Companies the largest being the Burma Oil Company have by adopting the American system of wells drilled to a depth of over 3150 ft and have obtained an enormously increased production The oil is pumped to Rangoon through pipes, running along the railway bank for part of the way There is a P W D Bungalow at Thittabwe near the steamer landing-place, and a District Bungalow at Yenangyaung There is a connection by seaplane with Rangoon Road connection with Meiktila (89 m) is difficult

The principal places of call below Yenangyaung are (on opposite banks) **Magwe** and **Minbu**, where there are mud volcanoes, situated about 2 m W from the river bank The Aeng Pass in the Arakan Yomas lies W of Minbu.

At Minbu about 20 m below Minbu, there is an old Burmese fort, the scene of a brief fight in the war of 1885 Soon after crossing 19° 29′ 3″ parallel of latitude (the old frontier, formerly indicated by masonry pillars and inscriptions specimens of which are preserved in the office of the Deputy Commissioner, Thayetmyo) the cotton-mills of Allanmyo may be seen on the l On the W , almost opposite another mill will be noticed and a little S of it the old British fort used as a camp for Italian and Turkish prisoners of war in 1915

Thayetmyo (D B K) like Toungoo is an old frontier station There is an excellent 9-hole golf course Permission to play can be obtained from the Hon Secy Thayetmyo Gymkhana Club

The down mail steamer arrives at Thayetmyo twice a week and another steamer calls daily and takes up passengers for Prome It is thus possible to spend twenty four hours in perhaps the prettiest station in Burma The park like land S of the fort is a portion of the old Cantonments

Across the river and facing Thayetmyo, is the small town of Allanmyo named after the officer who demarcated the frontier between Upper and Lower Burma at this point in 1853

From Thayetmyo **Prome** (161 m by railway from Rangoon) is reached The traveller can take the rail to Rangoon (9 hrs) arriving next morning The railway was opened in 1877

The river journey to Rangoon takes three days

The only accommodation is a small travellers' bungalow Meals can be obtained, but dinner can be obtained on board one of

the steamers that remain at Prome over night. There is also a refreshment-room at the station

Prome town is situated on the E bank of the Irawadi River The town was entirely destroyed by fire in 1862 and again in the Japanese War The Strand Road extends from one end of the town to the other, and from it well-laid-out streets run E., intersected at right angles by others Close to the centre of the town are the Court Houses, the Anglican Church the Market and the Jubilee Clock Tower The Municipal Waterworks, opened in 1885, supply the town with water from the river Most of the residences of officials are on the hill just to the S of the town, which affords a view of the town and neighbourhood

Prome is very ancient, and is mentioned as the capital of a great Kingdom before the Christian era The original capital was Thayekhettaya, of which the ruins extend for about 10 m in every direction from **Hmawza** rly stn (6 m S of Prome on the line to Rangoon) Remains exist of massive brick walls and of embankments, pagodas, enclosures and burial grounds The place was destroyed by the Talaings in the 8th century, reconquered by Burmese from the N in 1056 and Prome became one of the chief centres Captured on 25th April 1825 by the British, it was restored but again taken in the war of 1852 The principal industries are the manufacture of silk cloth, gilt boxes, and lacquer work The chief objects of archæological interest are two pagodas—Shwesandaw in Prome town and Shwenattaung 1½ m from it

The **Shwesandaw Pagoda** is on a hill ½ m from the east bank of the Irawadi and covers an area of 11 925 sq ft, rising from a nearly square platform to a height of 180 ft It is surrounded by 83 small gilded temples forming a wall round the pagoda, leaving a narrow passage between it and them There are four approaches to the platform The N and W are covered in with ornamented roofs, supported on massive teak posts, some partly gilded and partly painted vermilion The platform on the top of the hill has been repaved with slabs of Italian marble, and round its outer edge are carved wooden houses, facing inwards, interspersed with small pagodas, in which are figures of Gautama standing, sitting, or lying Between these and the main pagoda are many Tagundaing posts with streamers, and the largest collection of bells in Burma some of them of great antiquity The pagoda has two gigantic lions of conventional form at the N entrance In 1753 A D this pagoda was regilt by Alompra in 1841, King Tha ra waddy had it repaired and regilt, and surmounted with a new *hti*, or crown of iron, gilt and studded with jewels, in 1842 the carved roofs over the N and W approaches were put up by the Burmese Governor In 1858 the pagoda was again repaired, and later regilt In 1910 two new *htis*, with the usual costly ornamentations were substituted for the old Burmese and Talaing *htis*, the frameworks of which are now to be seen in a building on the platform The pagoda is lit by electricity. The annual festival is

held in November Europeans do not now enter the precincts of the pagoda

The **Shwenattaung Pagoda** — This pagoda, 16 m. S. of Prome, richly gilt and glittering in the sun, stands out conspicuously on the first hill of a low range, overhanging the Shwenattaung plain, and has in a line behind it several other pagodas. The Shwenattaung is said to have been built during the reign of the founder of Prome by his Queen It was repaired and raised by Thihathu, King of Prome, and again by Tabin Shweti, King of Toungoo (1530-1550), who had conquered Prome Its eight-day festival in March is attended by thousands The pagoda can ordinarily be reached from Prome by road. There is no accommodation. The Taungup Pass over the Arakan Yomas is 1110 m W.

Prome to Rangoon by Rail

From Letpadan Jn. (84 m from Prome, 78 m. from Rangoon) a branch line runs to (23 m) Tharrawaw Shore, whence there is a steamer to Henzada shore, 3 m from Henzada Junction. The line, opened 1903, continues (85 m) to Bassein (Route 4) A branch line runs N (147 m) from Henzada to Myonaung (p 709) and Kyangin (65 m.), crossing the Ngawun River by a bridge with a Scherzer lifting span of 200 ft (1908)

Henzada (Hengla) has a large D.B., in addition to a Circuit House, and a P.W.D. Bungalow. Permission to occupy them must be obtained from the Deputy Commissioner and the Executive Engineer, Embankment Division, Henzada, respectively. All are [illegible]ed. The District is also well equipped with bungalows, which would prove useful to hunters of big game, which abounds 15 m. to the W. of the Henzada to Kyangin Railway, but roads are bad. As shooting grounds are almost all situated within reserved forests, a licence must be obtained from the Deputy Conservator of Forests. There are daily steamers to Rangoon

9 m S. of Letpadan on the main line is **Tharrawaddy** (69 m. from Rangoon), in a district between the Pegu Yomas (E.), the Irawadi River on the W, the Prome District on the N, and the Insein District on the S The Myitmaka River, farther Southward, known as the Hlaing or Rangoon River, traverses the District, which is mainly agricultural It contains extensive forests on its Eastern side, teak and other timber are extracted by Government agency

At Myodwin, 8 m from Gyobingauk station (52 m from Prome, 109 m from Rangoon) there are the remains of a fort built three centuries ago by a Prince named Thadomingaung, or Thônmyoyin (*i e*, lord of three towns), to whom at that time Paungde, Tharrawaddy, and Toungoo owed allegiance.

Tharrawaddy formed part of the Talaing Kingdom of Pegu and became Burmese when Alaungpaya conquered Pegu in 1753 It was part of a fief of the prince who, by deposing his brother from the Burmese throne, became King of Burma as the Tharrawaddy Min, or the Shwebo Min, and reigned from 1837 to 1846 The District has long held an unenviable reputation on account of the criminality of its inhabitants

There are Inspection Bungalows at all township headquarters and principal railway towns but, except at Tharrawaddy itself, the traveller must be prepared to make his own arrangements for food

Prome to Rangoon by River Steamer.

If the journey from Prome to Rangoon (311 m.) by river steamer is chosen, the first place of call is (55 m.) **Myonaung**, hdqrs. of a subdivision and a station on the railway line from Henzada to Kyangin Shortly before it is reached, the steamer passes Gaudama Hill, with a highly sacred pagoda on the crest, and ancient and minutely-carved figures of Buddha cut in the face of the cliff. 60 m farther on is **Henzada** (p 708) 44 m from Henzada is **Danubyu**, famous for the production of a superior quality of Burma cigar, it was the scene of an encounter with the Burmese in 1825, when Maha Bandula was killed (p 677) **Yandoon**, 16 m. lower down, is the centre of the *ngapi*, or salt-fish industry 50 m. separates it from **Maubin**. **Dedaye** is the next halt, 53 m from Rangoon, which is reached by the Twante canal (1917) 22 m. long

ROUTE 2.

From **RANGOON** to **MOULMEIN**, and thence by steamer to **Tavoy** and **Mergui**.

Moulmein town, justly described[1] as the most beautiful town in Burma, should on no account be missed It is comfortably reached from Rangoon by rail *viâ* Pegu Junction (p. 691) to Martaban (173 m), and thence by ferry steamer (½ hr), or direct by sea or seaplane

79 m from Rangoon the Sittang River is crossed by a bridge 1749 ft. long (1907) The river drains the S Shan plateau, and is connected by canal (1877) with the Pegu River.

Thaton (134 m.) was formerly a Talaing capital and was destroyed by Anawrata (1044-77) It was once a seaport, but the sea has long since receded The principal pagoda is built of laterite

From Thaton there is a drive of 16 m to the Kadaik valley, a beauty spot

Martaban the railway terminus, is an ancient trading centre It has given its name to a peculiar type of pottery, also known as Pegu jars: these are of very large size and glazed They are mentioned by Ibn Batuta of Tangier in 1350, and by many European travellers Martaban was in Siam in 1824.

The visitor entering the Salween from the Gulf of Martaban finds the banks covered with the most varied of evergreen foliage, in

[1] *The Silken East*, by V. C. Scott O'Connor (Hutchinson, 1906).

marked contrast to the low-lying muddy flats that line the delta of the Irawadi

Moulmein * is situated on the river Salween, 28 m. from the sea, within sight of the junction of that river with the Gyaing and the Attaran The large island of Bilugyun faces it on the W

Right and left, parallel with the river, are low ranges of hills dotted with pagodas, while to the N and N.W beyond the town the precipitous mountain Zwègabin Daung, known locally as the Duke of York's Nose, and the Zingyaik range stand in bold relief against the sky. Moulmein takes the form of an inverted "L," four-fifths of the town, or the portion representing the perpendicular, lying along the left bank of the Salween, flanked on the E by a low, irregular, pagoda-crowned ridge, and the short horizontal line representing the Daingwunkwin quarter on the N stretching along the left bank of the Gyaing River to its junction with the Salween

As a British settlement Moulmein dates from the year 1827, when it was selected by General Sir Archibald Campbell as the capital of the newly-acquired Tenasserim Province, extending to Victoria Point, inhabited by Talaings, ranks next to Rangoon for its trade in teak and rice, and has flourishing rubber plantations to the S. Ships (such as the *Cospatrick*, 1415 tons) were built here from 1856. A grass from which oil is extracted is grown in the neighbourhood

The two pagodas (not "looking eastward to the sea") worth visiting are the Kyaikthanlan at the N. end of the ridge and the Uzina in the centre

The view from the Kyaikthanlan Pagoda is unsurpassed in all Burma, and is thus described in *The Silken East*:—

"From the S.W angle there is unfolded a picture of a wide river making its last progress in loops and curves to the sea Enthusiastic people say it is as fine as the harbour of Sydney. At some distance from the river a long, low line of hills runs down on the E, and another, the nucleus of Bilugyun, runs along the W, a rampart for the retreating sun The river enfolds in its course several large, low-lying islands, and at one point at Mupun it makes a beautiful curve, ending in a headland where rice and timber mills send their smoke into the air, and ships at the harvest season wait for their cargoes to the distant world

"Looking more directly to the W., there is the river again in a straight bar of gold under the long town of Moulmein More ships lie here, and they look to me as if they had dropped without explanation from the great world outside into this landlocked anchorage under the swooning palms Looking more North, my eyes are greeted by the Zingyaik Hills, whose loftiest peak, 3000 ft in height, dominates the whole panorama Between these hills and Bilugyun the right branch of the Salween makes its way to the sea In times gone by—in the days of the castle of Murmulan, when Portuguese artillerymen manned the guns of Martaban, and hungry adventurers from the W. swept in their galleons up the gulf—and down even to more recent times, *this* was the main channel of the river."

This magnificent panorama can only be seen in perfection up to the middle of January, thereafter heat-haze partly obscures the view to the N and E.

The **Kyaikthanlan**, 152 ft high and 377 ft. in circumference, was founded many centuries ago on the site of a former pagoda destroyed by the Siamese in one of their periodical invasions:

hence the name in the Mon language, still spoken in the neighbourhood of Moulmein, *Kyaik Sem Lum*, the pagoda which the Shans destroyed Visitors should notice the big bell with quaint English inscription — "This bell is made by Koonalenga, the priest, and weighs 600 viss No body design to destroy this Bell Moulmein, March 30th, 1855 He who destroyed to this Bell, they must be in the great Heell, and unable to coming out"

On the platform of the **Uzina Pagoda** are some well-carved, life-size figures representing the four objects, the sight of which determined Gautama to become a hermit—a decrepit old man leaning on a staff, a man suffering from a loathsome disease, a putrid corpse, and a recluse in yellow garments, with features expressive of resignation and absence of worldly care

The jail saleroom occasionally has good specimens of wood-carving, and is worth a visit The Kaladan bazar deserves a prolonged visit, for all sorts of curios can be obtained by experts in collecting Chinese and Siamese silks are purchasable at reasonable prices The Municipal Secretary will furnish visitors with a list of the principal ivory carvers, silversmiths, etc. A visit should also be paid to one of the numerous timber mills to see the elephants working. There is an aeroplane landing-ground here

The following excursions should not be omitted —

(1) By steamer (Irawadi Flotilla Company) to Pagat (D B.), thence 2 m. on foot or by bullock-cart to the Kawgun caves A second day is required for the return journey In one, called the Fish Cave, there is a subterranean lake, and a Burman canoe takes the traveller right through the heart of the hill, a weird passage of some 600 yds., in pitchy darkness

The **Kawgun Cave** is thus described in *The Silken East* "Masses of rock running parallel to the cliff's face make the outer wall of the first chamber Ten thousand images of the Buddha lie within the first sweep of the eye, from yellow-robed figures which line the footpath to terra-cotta plaques fixed high on the jutting face of the cliff; from golden colossi twice the height of Goliath to miniature figures fit for a pen-wiper A great stalagmite rising up from the floor to near the brow of the overhanging cliff is completely covered with small images of the Buddha enthroned and its summit is crowned by a small pagoda"

If the visitor can, before sunset, take his stand on the river-bank ½ m N of the village, he will see one of the most extraordinary sights in the world precisely at sundown the bats issue in myriads from a narrow cleft in the cliff overhanging the river and take their flight S towards the sea To quote once more from the same book —

"Yet one more sensation remains to complete the bizarre suggestions of the day For as I near the gateways of Pagat I am startled by the sound of a great flight of birds, a sound as of grey geese on the wing, but of such volume as can proceed only from a great host These are the bats of the Pagat caves.

"For more than twenty minutes they sweep out in a long swift line that grows tortuous as it recedes, and as far as I can see into the ruddy twilight the line extends. Swiftly as each creature in it is

flying, it looks in the distance like a smoke spiral waiting for a wind to blow it away. They go every evening, say my boatmen, to drink the salt water of the sea, and they cross in their flight the crests of the Zingyaik Hills"

Next morning by an early start in a bullock-cart, another cave, Yathay-byan, 3 m off, can be visited. It is even more interesting, situated on the side of a precipitous limestone hill. If torches or a lantern be used, it is possible to pass for ½ m right through to an outlet on the other side of the hill

(2) From Pagat to Pa-an (8 m.) and on to Shwegun (35 m) by the same daily service of steamers noted above The scenery is fully equal to that on the upper defiles of the Irawadi

There are furnished bungalows at Pagat, Pa-an, and Shwegun, but the visitor must take his food, bedding, and servants, unless he omits Pagat and Pa-an, and sleeps on board the steamer at Shwegun

From Pa-an, Naunglon (D.B) is 11 m by motor. The road runs through superb scenery past the hill known as the Duke of York's Nose; and thence visit the Elephant Cave

(3) Moulmein to Kawhnat monastery (8 m). There is a service of steam-launches several times a day to Kado, and thence it is a shady walk of ½ m through Kado and Kawhnat villages to the monastery, where are to be seen perhaps the finest specimens of modern *thein* architecture in the whole of Burma, as well as a magnificent collection of ivory carvings. A brief descriptive guide-book to these buildings has been prepared, and copies can be borrowed from the Deputy Commissioner of Amherst or the headman of Kado

(4) Moulmein to the Hpayôn [illegible] called The Farm) caves—distance, 9 m.

The best way of making the trip is by car to the Nyaungbinzeik ferry on the Attaran (4 m.), and thence by bullock-cart. The caves are situated in isolated hills of limestone, which rise picturesquely and abruptly out of the surrounding alluvial plain. They were evidently excavated by the sea. The first consists of an entrance hall running parallel with the face of the rock, a long chamber running into the rock at the S. end, and a subsidiary entrance and hall at the N. end Along these halls run brick platforms covered with images of Gautama and his worshippers The second cave, better worth visiting, is ½ m to the S, and access is gained by a steep path for some 30 yds to a small opening in the cliff face To explore properly the enormous cavernous recesses, with their stupendous stalactites and stalagmites, it is necessary to come provided with a supply of blue light illuminant, which can be obtained at any of the numerous chemists in Moulmein Umbrellas should not be forgotten, as bats swarm.

(5) Moulmein to the Moulmein Rubber Plantation Company's estate at Kwanhla (38 m.)—Notice of a visit should be given by wire to the Manager The journey can be made in 2 hrs by motor.

In the Kwanhla and the adjacent Kyonkadat estate (Amherst Plantation Company) trees can be seen in all stages of growth up to 13 years The soil is declared by Straits experts to be equal to the best in Malaya

(6) Moulmein to Kyain Seikgyi—a whole day by steam-launch (daily service by the Irawadi Flotilla Co)

At Kyain Seikgyi and Nat-

chaung there are furnished Government bungalows, but food, bedding, and servants must be taken

Another trip can be made to **Amherst**, a most attractive seaside resort (the Executive Engr., P.W.D. should be asked for accommodation in the dak bungalow) Seesai is a bathing resort close by

A railway runs S. 87 m. to Ye. The Japanese "Death Railway" crossed a Three Pagodas pass (south-east) from Tana Béra junction 255 m. to Bampong on the Siamese Railway

Moulmein to Tavoy and Mergui

From Moulmein the visitor may extend his journey to **Tavoy** (wolfram-mining) and **Mergui** (pearl-fisheries), to which places the steamers of the B I S N Company ply Unless he goes by air (both places have landing-grounds) he will probably find that his journey will occupy more time than he can devote to it

Tavoy is on the Tavoy River, about 30 m. from its mouth There is a bathing beach at Mamagan E. and W., ranges of hills run nearly due N. and S. Tavoy contains numerous pagodas and monasteries, none of special interest Its trade is carried on chiefly with ports in Burma and the Straits Settlements

Valuable minerals—viz., wolfram and tin—have been discovered, both in large quantities One of Burma's important contributions to the European War of 1914-18 consisted of wolfram from Tavoy for munitions, but it was lost in 1942.

The trip from Tavoy to Mergui passes through the **Mergui Archipelago**—a large group of islands which, commencing in the N. with Tavoy island, stretches southwards beyond the limits of British territory in Burma. They are sparsely inhabited by a peculiar race, the Salons, who rarely leave them to visit the mainland The principal products are edible birds' nests and *bêches de mer* The islands are infested by snakes and wild animals

Mergui is an island in the principal mouth of the Tenasserim River, which falls into the Bay of Bengal about 2 m. N Mergui is mentioned by Cæsar Frederick in 1563 Its modern importance is due to the discovery of valuable pearl-beds in its vicinity Mining for tin and wolfram is carried on throughout the district, while the rubber plantations are attracting capital The harbour is formed by Pataw Island lying between the town and the sea The D B in Mergui town has accommodation for four travellers.

Fortnightly steamers (B I S N. Co and Straits Settlt. S S Co) run between Mergui and Victoria Point (which forms the southernmost limit of Burma, with a landing-ground for aeroplanes), and a bi-weekly launch between Pataw and Tenasserim, 44 m. from Mergui, once a famous trade mart

ROUTE 3.

RANGOON to KYAUKPYU and AKYAB

The visitor proceeding from Rangoon to Calcutta, with a week to spare, may take the B I S N Company's steamer (weekly) to **Kyaukpyu** and **Akyab**, calling (except during the monsoon) at Andrew Bay, whence it is 12 m. to Sandoway (landing-ground for aeroplanes) Along this coast there are mud volcanoes

Kyaukpyu (Shweymyo) has the finest natural harbour on the coast and was formerly a British Cantonment commanding the Taungup Pass over the Arakan Yomas into the Irrawaddy Valley In 1825 part of the British Force crossed this Pass. The town is situated in the N of Ramri Island, and lies close to the seashore, upon a sandy plain, bounded on the S W by a low range of sandstone hills, which breaks the severity of the monsoon In April 1936 a cyclone caused a tidal wave, 16 ft high, which did much damage The P.W D Rest-house and Circuit-house may be occupied by permission of the Dy Commissioner

Akyab (D.B) is the headquarters of the Arakan Division and a seaport with two moorings It is the milling centre for the vast paddy plains of Akyab Dt Outside is the Great Savage Rock with a lighthouse (1844) Originally a Magh fishing-village, Akyab dates its prosperity from the close of the First Burmese War (1826) It was destroyed in the Second World War The airport here has added to the number of Europeans. The animals, except the pariah dogs, are very small.

Myohaung, ancient capital of Arakan, 50 m. up the Kaladan and Lemro Rivers, was the seat of the Mrauk-U dynasty for 350 years up to 1784 (the last King was Samada), and contains architectural remains which experts hold to be unique in Indo-China. For a description reference may be made to the report (1801) of Dr Forchhammer on the Antiquities of Arakan The ruins of the ancient fort, with traces of the massive city wall and the platform on which the old Palace stood, and the **Andaw, Shithaung,** and **Dukhanthein** pagodas, with their dark passages, images, and inscriptions, and the Pitakat Taik, or ancient depository of the Buddhist scriptures, are among the most interesting sights

At **Mahamuni,** some 22¼ m. farther N., is the empty shrine of the Mahamuni image, carried away by the Burmese to Amarapura in 1785 The building contains the mysterious Yattara bell with its astrological inscription Launches of the Arakan Flotilla Co. ply from Arakan to Myohaung and to Mahamuni, also to Buthidaung, where there is a pass to Maungdaw on the Naaf River, and on which there was very severe fighting with the Japanese

A trip may also be made by river steamer to **Paletwa**, the headquarters of the Arakan hill tracts District, which is inhabited by Chaungthas, Shandus, Kwemis, Chins, Mros, and other strange hill tribes There is a comfortable Circuit Bungalow capable of accommodating two travellers, but meals cannot be obtained

Wild goat (such as goral and serow) and an occasional gaur and elephant can be shot on a plateau

or hill named Kyaukpandaung 4500 ft high, situated about 26 m from Paletwa. Rhinoceros, the double-horned variety, and elephant are fairly numerous along the Ru and Lemro streams. The hills are steep and are covered with bamboo jungle, sparsely interspersed with trees Fair Mahsir fishing is also obtainable on the Lemro Wild pig, jungle fowl, pheasant and partridge abound everywhere

ROUTE 4.

From **RANGOON** to **BASSEIN** and back

Bassein can be reached by railway from Rangoon (192 m.) by way of Letpadan junction (p 708) and Henzada, or the trip can be made in 18 hrs in one of the express steamers of the Irawadi Flotilla Company which leave for Bassein daily The trip is of interest to those who wish to see something of the lower reaches of the Irawadi, and of the mode of life of the people of the delta All necessary information will be readily furnished at the office of the Irawadi Flotilla Co, 50 Phayre Street, Rangoon. There is a landing-ground for aeroplanes at Bassein

Bassein is about 80 m from the sea on both banks of the Ngawun River, the extreme Western mouth of the Irawadi It is a place of call for ocean-going steamers The Alguadar Reef off Cape Negrais has a lighthouse (1865)

The town is said to derive its old name Patkain from "Pathi," the Burmese term for Muslims, as there were so many of them To this fact legend ascribes the building of the Shwemoktaw Pagoda, in the centre of the town, said to be one of the most ancient and venerable in Lower Burma A Muslim Princess named On-mā-dan-di had three lovers (presumably Buddhists), and she told each of them to put up a pagoda. One put up the Shwemoktaw, the second put up the Tagaung Pagoda, at the Southern edge of Bassein town, and the third put up the Thayaunggyaung Pagoda. The word "Bassein" is a corrupted form of Kusim, the Cosmin of the

Portuguese and other early European writers

Bassein loomed large in the Second Burmese War of 1852, and for many years there was a British Fort there, which included the site occupied by the Shwemoktaw Pagoda; but all traces of the stockade have disappeared The Roman Catholics have a mission here, and the American Baptist Mission has three branches—for the Burmese, for the Sgau Karens, and for the Pwo Karens There is also an Anglican Church and a clergyman of the Additional Clergy Society

The principal local industries are pottery and light sunshades, coloured with pretty designs, and famed throughout Burma There are several rice-mills on either side of the river

The District is especially noted for its fisheries, the largest being the beautiful Inye Lake, like a Scottish loch, in the Kyonpyaw subdivision, in the shape of a horse-shoe, with a large island in the centre, about 1½ m long and 1 m broad Diamond Island, which is also included in the District, is a charming little islet lying well out at sea opposite the mouth of the Ngawun River, over 70 m from Bassein It is in wireless communication (erected 1906) with Calcutta and Port Blair, and is the place of call for steamers requiring pilots to come up the Bassein River Large turtles lay thousands of eggs on the shore of the island These eggs are exported in enormous numbers The Irawadi Flotilla Company's steamers ply to all important villages in the District

ROUTE 5.

Up the CHINDWIN to KINDAT.

The river Chindwin is the greatest tributary of the Irawadi Rising as the Tanai in the Hukawng Valley, N.W. of Myitkina, it flows 800 m. long through the Upper and Lower Chindwin, and enters the Irawadi about 15 m N. of Pakokku (p 703)

Owing to the shallow, tortuous and narrow nature of the channels, stern-wheel steamers of light draught can be used only from October to June, and first-class accommodation is necessarily limited The scenery is as remarkable in its tropical luxuriance as any in Burma, and interest is enhanced during the open season by the picturesque costumes of the various tribesmen who come down to the river-side villages in large numbers on their way to the plains in search of work and trade A tour requires careful inquiry and planning

The steamers of the Irawadi Flotilla Company start from Pakokku (p 703), which can be reached by river from (583 m) Rangoon or (125 m) Mandalay, but if the visitor is at Mandalay it will probably be found more convenient to take the train from Mandalay to (77 m) **Monywa**, which is 76 m. by river from Pakokku In the rains a steamer from Pakokku leaves Monywa for Mawlaik (269 m.) and **Kindat** (276 m) on Tuesday, Mawlaik for Homalin (154 m farther up) on Sunday, and Mawlaik for Monywa on Friday in each week In the dry season it runs twice weekly, and terminates at Pantha (288 m. from Pakokku), and then returns to Monywa next day, the

Mawlaik-Homalin run being served by a small steamer, without first-class accommodation, which leaves Mawlaik every Sunday and Homalin on the Thursday following. All these steamers have a bazar on board.

The principal places are **Monywa**, headquarters of the Lower Chindwin district, picturesquely situated on the left bank and commanding a wide view of the hills on the opposite bank. **Alone** (84 m.), the next stn and an important timber depot, the Chindwin Valley forming the natural outlet for the trees felled in the teak forests which are formed into rafts and floated down to Pakokku and thence to Rangoon. **Mingin** (183 m.) on the right bank, a prosperous village, the residence of many timber merchants.

Kalewa (228 m.), the riverine station for the Kalemyo police outpost on the Chin Hills, the river Myittha, which flows through the Kale Valley, joins the Chindwin here. In the Japanese war a military road was made *viâ* Kyigon (18 m.), Tiddim (50 m., alt. 5500 ft.) and Tamu (76 m.) in the Kabaw Valley, the continuation of the road to Imphal (p. 490). Kennedy Peak (alt. 9000 ft.) is S.E. of Tiddim, headquarters of the N. Chin Hills. Fort White is 12 m. S.

Mawlaik (269 m.) is the headquarters of the Upper Chindwin District. Oil has been found 24 m. E. **Kindat** (276 m.) is the last British settlement. The Nan-u-shwe-bôntha Pagoda is near the Post Office, Kindat. It is said to have been erected by Alaungpaya (1753-60) after the conquest of Manipur. Across the river, picturesquely situated among the hills, is the Paungdaw-u Pagoda said to be the work of his son Sinbyuyin (1763-75), who also marched against Manipur. **Pantha** (288 m.) has a cluster of white pagodas.

Beyond Pantha is (42 m.) **Sittaung**, the starting-point for the mail route by runner into Manipur (*p.* 490), which went through Tamu (37¾ m.). The road cannot be used by carts, and is crossed by streams which are impassable when in flood. **Paungbyin** (69 m.) has been supplanted as the residence of the local Burmese official by **Homalin** (134 m.).

Difficulties of navigation begin on the Chindwin in January or February, and are not over till May. The river has to be buoyed afresh each year, and three Government launches are constantly employed on this duty and in the work of removing snags from Homalin downwards between the end of October and the early part of June. The channels vary incessantly, necessitating frequent alteration of the buoys, and in the dry season steamers constantly run aground.

There are numerous whirlpools, the best known of which are the *Pe We, just below Kalewa*, the most dangerous spot on the river, a whirlpool opposite Masein (246 m. from Pakokku), where the R.I.M. steamer *Pagan* was lost in 1897, and another in the neighbourhood of Heinsun, below Kanti — "Anvil Whirlpool," so called from the anvil-shaped rock near mid-stream at its lower end: the current supplies the hammer.

Other Rivers.—The main tributaries of the Chindwin are the Yu and the Myittha from the W. and the Uyu from the E. Navigation on the Uyu is uncertain and difficult, but launches can go some miles beyond the border of the District, 135 m. from its mouth at the height of the rains.

Gangaw, 169 m. up the Myittha, can also be reached when the river is in flood.

Accommodation.—Mawlaik has a Circuit House and an Inspection Bungalow of the Public Works Department. There are

Inspection Bungalows also at Homalin, at Sittaung, Pyinbon, Kyaukzedi, and Tamu, on the Sittaung-Tamu Road, at Kalewa, Natkyigon, and Pyintha, and at Mingin Paungbyin and all township headquarters off the river have a Circuit Room in the court-house

The Public Works Department maintains fair-weather roads from Homalin to Maingkaing (30½ m.), with a branch to Thetkedaung (4 m.), Kaungngo (on the above road 4 m. from Maingkaing) to Paungbyin (62½ m.), Paungbyin to Kindat (65 m.), Pyintha towards Falam (19½ m. within the District), with a branch from Natchaung to Myittha at Indin. The nominal road from Homalin to Tamanthi (62 m.) is not maintained, but that from Leiksaw, on the Paungbyin - Kaungngo Road, to Naungpuaung, near the Maingkaing-Homalin Road (20 m.), has been constructed for cart traffic.

Physical Description — The Upper Chindwin[1] is the Northernmost district of the N.W. Frontier Division in Upper Burma. The Somra tract, a mountainous region S. of the Nantaleik Valley, populated by a Naga tribe, named by the Manipuris "Tangkhuls" and by the Burmese "Uzumbok" or "Crested Chins," is now administered, and is under the Dep. Commr. of the Upper Chindwin District.

The unadministered tracts within the boundaries of the country and the sphere of influence (more or less) of the Deputy Commissioner may be enumerated as follows —

(1) The Taro Valley, to the N. of the falls. This lies along the Chindwin, and is separated at its N. end from the better-known and larger Hukawng Valley (really a vast plain) by a range of hills through which the river flows in narrow defiles. The valley is held by petty Kachin Chiefs with numerous Naga subjects. Sir Harcourt Butler as Governor made a tour (p. 187) in 1925 in this region, which resulted in the abolition of slavery in the Hukawng Valley. The cultivation is carried on by "jhooming" or burning new patches of forest to fertilise the soil.

A military road from Ledo in Assam to Mogaung (p. 701) was made by the American General Stilwell in 1943.

(2) The tract between the upper part of the Kamti State and the administrative boundary of the Naga Hills (a District of Assam which lies some 70 odd m. W. of Kanti itself). This is inhabited by wild Naga tribes, of which very little is known, and it has never been explored — at least from the side of Burma.

(3) S. of the above the Saramati range and the country round its base, including the valley of the Nantaleik. This also is occupied by head-hunting Nagas. The Nantaleik Valley was partly explored by Mr. Porter, Deputy Commissioner in 1893, and in 1911 Mr. Street, Assistant Commissioner, led a column along the same route, rounding the base of Saramati, and returning to the Chindwin, where it crosses latitude 26°.

(4) The tributaries of the Chindwin to the E. and S. of Kanti, towards the Kachin country to the N. of Myitkyina District, contain a few small and scattered Kachin and Naga villages, which regard the Kamti Sawbwa more or less as their over-lord, though they pay no tribute to him.

Minerals.—Coal exists in large quantities, but it would not at present pay to work it. The carboniferous tract lies between the Yu and Myittha Rivers.

[1] For an account of the Upper Chindwin, see pp. 130-136 of *Burma as I Saw It* by R. Grant Brown (Methuen, 1926).

Mineral oil occurs in several places, most plentifully within the coal-bearing tracts Strong indications that petroleum is located in the area to the E of Kindat, some 25 m distant from that centre, have led to the exploiting of this area by the Indo-Burma Petroleum Company There are also indications in the hill tracts on the E. of Kyabin township in the Mingin subdivision

Gold-dust is found in the Chindwin and other streams which flow into it from the E , but appears to be most plentiful in the Uyu River and its tributaries—in fact, some of the inland villages in the Maingkaing township have had a gold currency from time immemorial

Rubies and sapphires have been discovered on the Uyu. Jade is found in the Nantaleik River near Tamanthi, and on the Namsam, which forms the boundary between the Upper Chindwin and Myitkyina Districts in the extreme N E Clay is fairly common, but little use is made of it. Salt springs are found at Yebawmi on the Uyu, and boiling is carried on there to a small extent

CEYLON

[*Map faces p. 764*]

THE scenery of Ceylon[1] is magnificent, and its climate attracts an increasing number of visitors. It is very easy to reach Ceylon by steamer from a European port to Colombo, and there is direct railway communication with Madras and S India by the mail route *viâ* Talaimannar (p. 749). Visitors, not only from the East generally, but also from England, spend months in Nuwara Eliya, where there is an 18-hole golf-course, said to be the best in the East.

The most suitable time for a visit to Ceylon is between the months of November and March; but Nuwara Eliya (season February to May) is enjoyable also from August to January. The Ceylon Trade Commissioner, 28 Cockspur Street, London, S.W.1, or The Tourist and Publicity Bureau, Colombo, may be consulted.

The area of the Island is 25,332 sq. m., and the total population (excluding the military and shipping), as enumerated at the last census, 19th March 1946, was 6,650,825. It included Europeans, Burghers, Sinhalese, Tamils, Muslims (known as Moors), Malays, and 22,000 Veddas (aborigines).

The public debt has been incurred for harbour-works, railways, irrigation canals, water-works, drainage and other public works. The old kings constructed irrigation works by which a great part of Ceylon was made cultivable. The principal exports are tea, coconut products and rubber. Research Institutes for which are at Talawakela, Matugama and Madampa respectively. For home consumption the staple crop is rice.

Colombo Radio (1925) operates on a wavelength of 428.6 metres (see *Ceylon Radio Times*).

The Dutch Reformed Church began in 1642, the Anglican in 1845 (there is a Ceylonese Assistant, Bishop of Colombo), and the Salvation Army in 1883. St Andrew's Kirk, Colombo, was founded in 1841.

[1] SELECTION OF BOOKS ON CEYLON

Times of Ceylon Green Book, a Directory of Ceylon. (Annual.)
Ferguson's *Ceylon Directory*. (Annual.)
Ashley Gibson, *Cinnamon and Frangipani: Ceylon, the Isle of Sweet Savours* (Chapman & Dodd, 1923.)
R. Knox, *An Historical Relation of the Island of Ceylon*. (Original 1681, reprint, Maclehose, Glasgow, 1911.)
Automobile Association of Ceylon Handbook. (Ceylon, 1936.)
L. R. Mills, *Ceylon Under British Rule* (1795–1932.)
E. H. Vanderwall, *Contribution of the Dutch to the Making of Ceylon*.
Mrs R. Jones-Bateman, *Illustrative Guide to the Buried Cities of Ceylon*.
G. E. Mitton, *The Lost Cities of Ceylon*. (Murray, 2nd edn., 1928.)
A Refuge from Civilisation, by R. H. Bassett, 1932.
Jungle Tide, by J. Still, 1933.

The Currency of the Island is on a decimal basis, and the rupee is divided into cents. The coins consist of copper (1 cent and ½ cent pieces), nickel (5 cent piece), silver (rupee, 50 cent, 25 cent, and 10 cent pieces) Ceylon Government currency notes of Rs 1000 down to R 1 are in circulation.

History.—The Mahawansa is the chief national Chronicle, written in Pali, on talipot palm-leaves, in the 5th century A D by Mahanama, a priest of the royal line This has been translated by Turnour (of the Ceylon Civil Service, 1837), Wijesinha, and Geiger (Pali Text Society, Colombo, 1912) The Dipavamsa, an older Chronicle, is the history of the Island. The Suluwansa is the Chronicle of a race of inferior power

Wijaya (543 or 483 B C) is said to have come over from India on a raiding expedition and established himself in Ceylon Though the Mahawansa describes a visit of Gautama Buddha to Ceylon, there is no historical evidence for it. During the reign of Dewanampia Tissa (307–267 B C), Mahinda, son of Asoka, King (272–231 B C) of Magadha in India, was sent over to introduce Buddhism into Ceylon

The Tamils (=damilos in the Mahawansa), *i e* the Cholyans and Pandyans of S. India, constantly raided the island. Elara was a Cholyan king (205–161 B C), his cenotaph is at Anuradhapura Another Tamil invasion was in 104 B C ; another in the middle of the 9th century. Sena II crossed to India to help a Pandyan prince The Indians looted Anuradhapura and carried Mahinda V (1001 A D) captive.

Wijaya Bahu I., a poet (1065 A D.) recovered Polonnaruwa from the Tamils. This was the seat of Parakrama Bahu I, the great king (1164 or 1153 A.D) for 33 years.

The Portuguese appeared on the scene in 1505, and from 1592 the native kings ruled from Kandy. "The Dutch dispossessed the Portuguese in 1656, but gave way in turn to the British, who have held the Maritime Provinces since 1796, and the whole Island, including the interior and Kandyan Kingdom, which neither the Portuguese nor the Dutch ever occupied, since 1815."—(*The Ceylon Manual*, by H. White.) See also Kandy (p 731)

The Archaeological Survey began in 1890

Capitals.—The capital of Ceylon has changed from time to time, and various dates have been assigned to the moves. Earlier than Anuradhapura, the capital was Magama (Tissamaharama), in the extreme S E of the island. Anuradhapura, founded about 500 or 437 B C, became the settled capital from about 267 B C to 729 A D.; according to other statements, from 500 B C to the middle of the 9th century Within the above period Sigiriya was the capital for 18 years from 477 A D, during the reign of Kasyapa I Polonnaruwa, as a capital, has been dated from 781 to 1288 A D ; also, variously to 1013 A D, and, with breaks, up to 1314 A D Yapahuwa was the capital, for less than 20 years in the 13th century, *c* 1277 The capital was at Kandy, from 1592 to 1815 Before Kandy, Kotta near Colombo, and (for a short time) Gampola, S. of Kandy, were capitals

Buddhism in Ceylon — The census has shown the Buddhists to be more numerous in Ceylon than the followers of all other religions The whole subject of Buddhism in Ceylon (belonging to what is called the Southern School) has been exhaustively treated in Bishop Copleston's work *Buddhism, Primitive and Present, in Magadha and Ceylon*, from which a few facts have, with permission, been taken.

When Mahinda, said to be a son of Asoka, King of Magadha, *c.* 274–237 B.C., introduced Buddhism into Ceylon about 250 B.C., he met the reigning king Tissa at the place now known as Mihintale (Mahindatale). He brought with him (in memory, for none of the books were yet written) the collection of Buddhist "Canonical Books," known by the name of the Three Pitakas, and the Commentaries upon them all in Pali. He translated them into Sinhalese (a language which was closely allied to Pali), and they are believed to have been preserved in Ceylon by oral tradition, till they were committed to writing about 80 B.C.

From Mahinda's time, Buddhism may be said to have been the national religion, and was officially patronised, shrines were built, viharas constructed as dwellings for the monks, and many inscriptions are still to be seen in which such donations are recorded. A very fine specimen of such an inscription, on the living rock, in "Asoka" characters, is to be seen close to the high road from Kurunegala to Puttalam, about 18 m. from the latter. It is in one line, over 100 ft. long.

Frequent invasions of Tamils from Southern India, and the usurpation of the throne by Tamil dynasties, repeatedly led to the expulsion of the monks and the destruction of their buildings. About 400 A.D. Buddhaghosha, the chief commentator, is said to have come from Magadha to inquire into these Commentaries. He translated into Pali what he found and composed more. His works have left their impress on the Ceylon school of Buddhism, and have been considered as absolute authorities on the interpretation of the sacred text. During the succeeding centuries the religion underwent many vicissitudes; but the victories of King Parakrama Bahu I., 1164–1197 or 1153–1186, "established him in undisputed power, which he used for the reformation and promotion of Buddhism and for the erection of innumerable buildings for its service." This period of prosperity was followed again by troublous times, and Buddhism had little vitality at the British occupation in 1796, it became "more and more the religion of the less civilised and less prosperous." In the period 1875-1900 there was a remarkable revival. There is a Vidyodaya College at Colombo.

To the Muslim Ceylon was the abode of Adam and Eve, after expulsion from Eden.

Names of Places.—The names of places in Ceylon have a formidable appearance, but acquaintance with the language explains them. Many of them end in *-pura*, or in the Tamil districts *-puram*, which means "town" (Sanskrit, *pura*), or in *-nuwara*, "city" (Sanskrit, *nagara*); many in *-gama* (Sanskrit, *grāma*) "village," others in *-gala* (Sanskrit, *giri*), "rock" or "hill"; *-kanda* is a "mountain", *ganga*, a river, *-oya*, a large stream.

Others, again, are formed with *-tara* (Sanskrit, *tāra*) or its equivalent, *-tota*, meaning a ford, or if on the coast, a port, thus *Kalutara* or *Kalutota* = Black Port or Ford. To these *-tura* corresponds in Tamil Districts.

Others are named after the artificial lakes, or "tanks," which are called in Sinhalese *tale* (Pali, *talāka*), or *wewa* (Sanskrit, *vāpī*), and in Tamil *kulam*; while smaller ponds give the termination *-vila* (Tamil, *-vilei*). Other common endings are *-demya*, "a strip of rice-field running into hilly ground," *-pitiya*, "ground," *-watta*, "garden."

Among prefixes are *maha*, great, *duwa*, an island, *ela*, a stream,

gaha, trees. The earlier part of the name is very frequently the name of a tree; just as in England we have Ashdown and Beech Hill. The word *ārāma*, a "pleasure-garden" or "park," explains Tissamaharama, "King Tissa's Great Park," and Thuparama, the park of the oldest "stupa" or "dagoba" in the Island

The visitor may thus recognise in Nuwara Eliya the "plain" in the territory of "the city" (Kandy), in Anurādhapura the "city" of the constellation Anuradha, Hambantota is the "port" of the Malay boats, called "hambans" or "sampans" Even Kahatagasdigiliwewa becomes intelligible as the "lake" of the kahata-tree branch, and Urugasmanhandiya as the "junction of roads by the uru-tree"

Administration -- Ceylon is a colony acquired partly by conquest and partly by cession It is administered directly from the Crown by the Secretary of State for the Colonies The Government was vested in a Governor (1931), assisted by a State Council until, on 8th November 1945 a new Constitution was accepted A Senate and House of Representatives are to be elected by Adult Suffrage, a Cabinet with a Prime Minister is to conduct the Government, and Dominion Status is expected late in 1947

The island is divided into 9 Provinces, each under a Government Agent The Governor is Sir Henry Monck-Mason Moore, G.C.M.G (residences at Colombo, Kandy and Nuwara Eliya)

Travelling in Ceylon is easy The **Railway** has always been a Government system. The first section was opened in 1865, 951 miles are now open, including the branches. The lines are constructed on a broad-gauge (5 ft. 6 in.) with exception of the Kelani Valley Railway and the Nuwara Eliya section (2 ft 6 in. gauge). On the main lines good sleeping accommodation is provided for a small supplement[1] Refreshment cars are attached to the express trains from Colombo to Talaimannar and to Kandy

Roads are mostly excellent, and almost every town of importance is situated on a road fit for motor traffic **The Rest-houses** are far more comfortable places of abode than the corresponding institutions in India In the larger towns they are hotels, but the traveller is not allowed to remain in them more than three days without permission, which, however, is easily procured On all the principal roads they are provided with bed- and table-linen, baths, tea and dinner services, etc

Motor-omnibuses, generally suitable, run on nearly every main road with seating accommodation for 8 to 37 persons; light luggage may be taken, free of charge A list of services will be found in Ferguson's *Ceylon Directory* **Motor-cars** can be hired from 50 cents to R 1 per mile; motor-bus fare, 5 to 10 cents per mile per seat Motorists are warned to be careful of the sharp elbows and S turns on the roads. The gradients in some places are severe

Good **maps** may be procured at the Surveyor-General's office, including a motor map, HIND/CLN 6, also from the Automobile Association. There are many *air* landing-grounds and seaplane bases.

[1] Sleeping berths should be booked well in advance. See the *Time and Fare Tables* of the Ceylon Government Railway.

There are race-courses at Colombo (where there is an electric totalisator), Galle, Kandy, and Nuwara Eliya. Race-meetings are held at Colombo at short intervals during the year; and there is a meeting at Nuwara Eliya in February, and also a Lawn-tennis Championship Tournament All games are popular

COLOMBO

COLOMBO ★ (lat 6° 55′ N., long 79° 50′ E., pop. 364,106 in 1946) Whether the visitor crosses over to Ceylon from India by the mail route from Madras *viâ* Talaimannar (see p 749), or whether he makes his entry by sea or air, Colombo, the "Charing Cross of the East," will be his first port of call. The aerodrome is at Ratmalana (1938) 8 m S

The Passenger Landing Jetty and Custom House lie at the S end of the harbour, and receive the protection of four magnificent breakwaters, of which the S.W Breakwater was first constructed The first stone was laid by King Edward VII., then Prince of Wales, in 1875, and it was completed in 1885 It is 4212 ft long, and is formed of concrete blocks of from 18 tons to 33 tons each, and capped by a solid concrete mass, the top of which stands 12 ft above low-water level It terminates in a circular head, 62 ft. in diameter, on which stands the Pilot Station and a small lighthouse showing a red light

The N.E. Breakwater is a rubble embankment 1100 ft long, tipped from a staging, commenced in 1896 and completed in 1902. The N W Breakwater is an island work 2670 ft in length, and running between the S W. and N.E. Breakwaters, leaving a S. entrance of 800 ft and a N. entrance of 700 ft. It was commenced in 1898 and completed in 1907.

An arm running at an angle to the S W. Breakwater, commenced in 1907 and completed in 1912, similar in construction to the S W Breakwater, is 1800 ft. long, terminated by a circular head .It covers the South entrance. The area protected by these breakwaters is 643 acres, or 1 sq. m., three-fourths of which have water more than 27 ft deep, and afford shelter during the S W monsoon

A Graving-dock (1906) is 723 ft. long, 85 ft wide at the entrance, with a depth over sill of 30 ft at low water. Docking is carried out by day or night (by electric light) There is a guide pier 800 ft long An inner graving dock, 350 ft long by 54 ft wide, is under construction A Patent Slip dealing with vessels up to 1200 tons was opened in 1903

There is a Coaling Depot, 25 acres in extent, and a barge-repairing basin. There are two jetties for bunkering oil-fuel, and one jetty for the discharge of oil tankers

There are warehouses on a reclamation on the S E margin of the harbour.

A canal connects the harbour with the Lake

Motor launches convey passengers from steamers moored in the inner harbour to the Jetty For these and rowing-boats there tariffs are fixed, higher by night The Colombo municipality issues a leaflet of information

The Grand Oriental Hotel stands near to and overlooking the Passenger Jetty, and close by are the Bristol Hotel, "Queen's House" (the Governor's residence), the Barracks, and some remains of the old Dutch Fort

Between the G O.H. and the Government Offices, and facing the harbour, is **St Peter's Church**,

the old residence of the Dutch Governors. It contains many interesting monuments, one to William Tollfray (1778-1817), a retired officer, who served under Wellesley (1803-4), and translated books of the Bible into Pali and Sinhalese

A little more than a mile away is the Galle Face Hotel The visitor will pass by the Government Offices, looking out on the Gordon Gardens, and, proceeding between Queen's House on his right, and the General Post Office on the left, he will, after passing the Clock Tower, the Barracks, the Council Chamber and Secretariat, find himself on the fine open space called the Galle Face A good view of the city may be had from the top of the **Clock Tower**, the flashing light is visible 18 m at sea, the attendant expects a small fee

Towards the south of the Galle Face Esplanade is the Colombo Club, overlooking the sea. About the middle of the Promenade is a stone like a milestone, with an inscription in which Sir Henry Ward, who made it, recommends the walk to the care of his successors for the use of ladies and children Near the Colombo Club stands the Victory column, 120 ft high, designed by Sir E Lutyens and completed in 1923 to commemorate Ceylon's part in the First World War

The City of Colombo extends from the Kelani River on the N to the fourth mile on the Galle Road on the S, and has a breadth of 3½ m. from the sea to the E outskirts, covering 8617 acres

Drives.—Colombo affords many charming and picturesque drives The first given below is recommended to those who have not yet seen anything of the East, and will afford a pleasing introduction to the distinguishing characteristics of Oriental life and scenery

(1) Commence at the Galle Face Hotel, and take the road North past the Barracks, until the statue of Sir E Barnes is reached He was Governor between 1824 and 1831 Then turn to the right down Princes Street into the Pettah, formerly the residential quarter of the Dutch burghers and now a typical Eastern bazar, and continue past an old Dutch belfry, beyond which are the old *Town Hall* (replaced by a fine new building overlooking Victoria Park) and *Public Market-place*

Here two streets diverge—one to the left, Sea Street, where dwell the dealers in rice and cotton, and where are two *Hindu Temples*, quaint and picturesque, but of no great size or importance, the other, Wolfendahl Street, to the right, conducts to **Wolfendahl** Church, a massive cruciform building on high ground, built by the Dutch in 1749, on the site of an old Portuguese church called *Aqua de Lupo*, and commanding a fine view of the city and harbour Here are monuments and hatchments recording the decease of Dutch officials It is the most interesting as well as the most complete of the few remaining relics of the Dutch occupation

The drive may be continued in a N E. direction to the R.C. *Cathedral of Santa Lucia*, the finest ecclesiastical edifice in the Island Adjoining it is a college for Roman Catholic boys and a convent Then N and a little W. the Anglican *Cathedral of Christ Church* (known as the "Stone Church") is reached It stands

in a park, given by Dr Chapman, the first Bishop. The Diocese was formed in 1845 About 1 m. to the N. is *St James's Roman Catholic Church* in Modara

The suburb of **Mutwal** is chiefly inhabited by fishermen, mostly Roman Catholics, as the numerous large and imposing R.C churches testify. In Mutwal are the new **Graving-dock**, and the Elie House Reservoir in connection with the town water-supply

At the **Kelani River** at the end of Mutwal, turn to the right, and, crossing a tongue of land till the river is again reached, follow its bank to the **Victoria Bridge**, which carries the great road to Kandy, and supersedes a most picturesque **Bridge of Boats**, long one of the most attractive spots in Colombo to an artist This part of the drive shows to perfection the way in which the tiny houses and small churches are nestled under the shelter of the trees

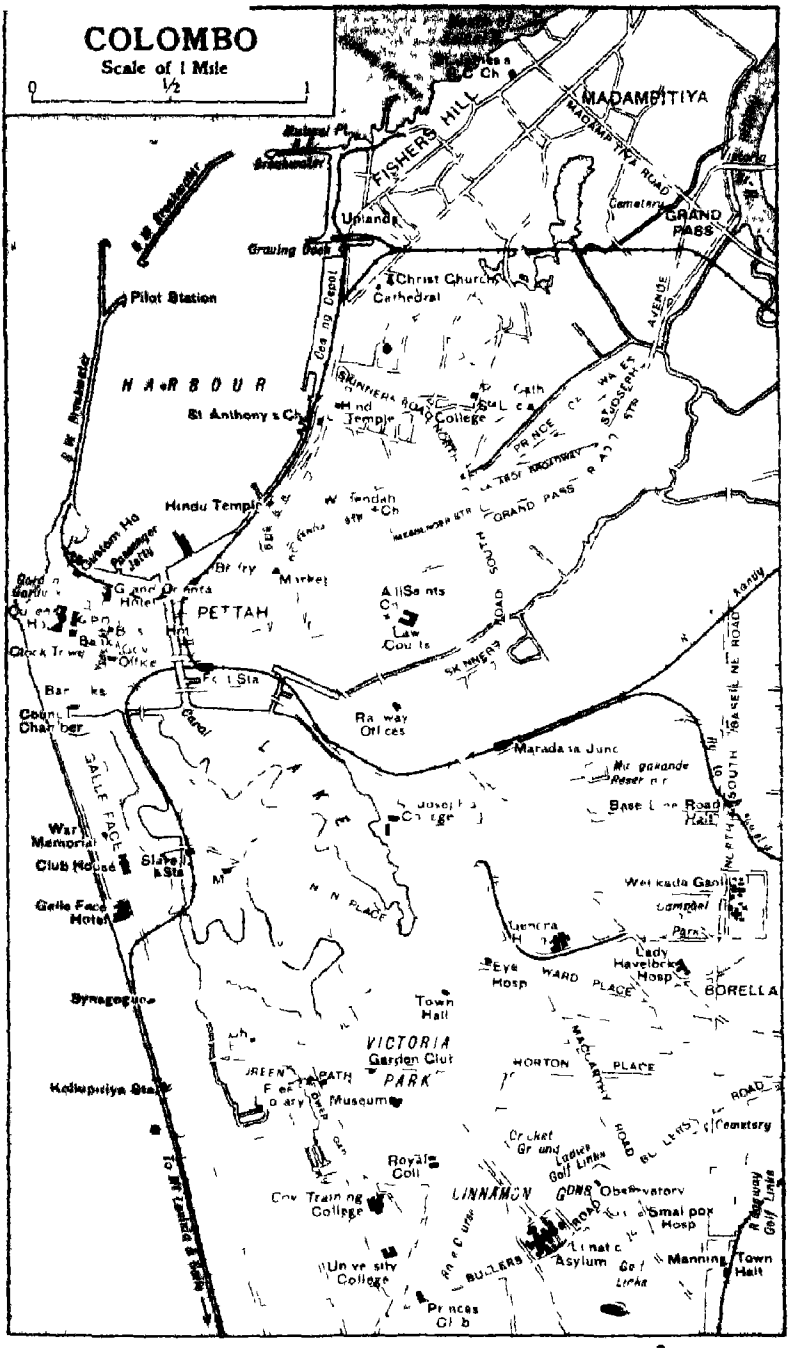
Turning to the right at the bridge, follow the road into Grandpass, and turn to the right till the Prince of Wales Avenue is reached Turn to the left at Skinner's Road until Maradana Ry. Stn is reached Thence proceed to the left along the Lake to Union Road and to the Galle Face.

(2) The second drive commences by crossing the bridge from Galle Face, almost immediately behind the hotel, to Slave Island, and then driving along the edge of a beautiful fresh-water lake past the pretty residence of the General commanding the troops in Ceylon to the **Victoria Park**. The Park occupies the site of the old **Cinnamon Gardens**, and is well laid out with ornamental grounds. A **Museum** (closed on Fridays) was built in 1877 It is exclusively devoted to the exhibition of Ceylon products, antiquities, and natural history. A famous tortoise, said to have been over two hundred years old at his death, is preserved here. On the ground floor are some interesting stone fragments, and particularly a colossal lion, brought from Polonnaruwa, on which the King sat to administer justice, one of the unique windows from the ruins of Yapahuwa (p. 748), the cast of a colossal portrait statue of King Parakrama Bahu, A D. 1153, some bronze statues from Polonnaruwa, also a stone Buddha from Toluvila

The copies of the frescoes at Sigiriya (p 750) are on the walls of the staircase, also a Portuguese cannon dredged from the harbour The crown, throne and footstool of the last King of Kandy were restored in 1934 by King George V There is a valuable library In front of the Museum is a statue of Sir William Gregory, Governor from 1872 to 1877 The Garden Club is in Victoria Park

(3) A drive may be taken from York St, near the Passenger Jetty, to Borella (S E) The interest of this drive is the bright picture it gives of the life of the people

(4) Another drive would follow the Union Place (avenue of Peltophorum trees), past the Eye Hospital in Ward Place, thence to the right to the New Town Hall overlooking Victoria Park, then by Torrington Place to Reid Avenue with the Race-course on the right, and the Royal College on the left The visitor can return by Buller's Road, past Prince's Club, to Kollupitiya (Colpetty) and the Galle Face or go on to the Zoo, further South This drive would cover the residential area called the Cinnamon Gardens.


COLOMBO
Scale of 1 Mile
0
½
1
MADAMPITIYA
FISHERS HILL
Uplands
Grauing Dock
Pilot Station
HARBOUR
Christ Church Cathedral
GRAND PASS
Hindu Temple
PETTAH
Market
All Saints Ch
Law Courts
Railway Offices
Clock Tower
Council Chamber
War Memorial
Club House
Galle Face Hotel
Synagogue
Kollupitiya Station
Town Hall
VICTORIA Garden Club PARK
Museum
Royal Coll
Cov Training College
University College
Princes Club
LINNAMON GONE
Observatory
Small pox Hosp
Lunatic Asylum
Golf Links
Manning Town Hall
Eye Hosp
Lady Havelock Hosp
BORELLA
Cemetery
Base Line Road
Marada na Junc
Mirigande Reser n
Jose ph's College
Wellawatte Cantonment
Campbell Park
Ramparts
Canal
Dematagoda Canal
Kelani River

Excursions.—One of the pleasantest is that to a Buddhist temple at the village of **Kelani**, on the bank of the river. Pass through the hot and dusty **Pettah** or Native Town, for about 4 m., as far as the river, which is crossed by the massive steel **Victoria Bridge** (see p 726). After crossing the bridge the road passes through coconut groves and houses for another 2 m., when the temple itself is reached

The *Mahawaṅsa* refers to it as contemporary with Buddha The original dagoba was built very early, but the one that is now standing was constructed between the years 1240-67 A D., and rebuilt about 1301 A D It is supposed to stand on the site of a shrine erected by Prince Yatalatissa 306 B C A valuable ruby on the pinnacle was given by Burmese of Mogok (p 702)

None of the exclusiveness which distinguishes Hindu and Muslim shrines is to be found in the Buddhist temples, to every part of which a stranger is freely welcomed by the yellow-robed monks. This, however, does not apply to the dewalas, which are, strictly speaking, Hindu shrines

A favourite excursion, especially on Sundays, is to **Mount Lavinia**, 7 m. from Colombo The Grand Hotel, which was built by Sir E Barnes, when Governor, as his Marine Villa, stands on a rocky eminence close to the station It has a special fish cuisine and facilities for sea-bathing A fine view of Colombo can be had from the terrace of the hotel. The Colombo Fort station is the most convenient starting-place for the journey by train which passes by the sea; but taxis are always available or a car to hold four (apply to Messrs Thos. Cook & Son, Lloyd's Building, Princes Street)

Motor-omnibuses run from Colombo E. to **Kaduwella** (p 739) and from Borella (p 726) S E to **Kotta**, the latter linking up with the Colombo-Borella tram service At Kotta, there is a C M S College, prettily situated

ROUTE 1.

COLOMBO TO KANDY

By rail 75 m Opened 1867

Those who are newcomers to the tropics will see for the first time vast stretches of paddy land of the most vivid green, the unfamiliar but soon recognised forms of the cashew, the bread-fruit, the jack, the frangipani, and the various forms of palm—coco nut, areca, kitul, and above all the talipot, a specimen of the gigantic white flower of which is generally visible at some point of the journey

From 1 m **Maradana** Junction a N G line runs to Avisawella and Yatiyantota A rail motor service from Homagama to Ratnapura passes through Yatiyantota (p. 739)

4 m **Kelaniya** stn Bridge over the Kelani River

At 9 m. **Ragama** stn The buildings of the former Boer prisoners' camp are now used as a Hospital and an Emergency Quarantine Camp There is a branch line from here to Negombo, Chilaw, and Puttalam (see Route 6, p. 747).

Near **Mahara** (10½ m) there is a convict establishment The convicts quarry the stone for Colombo, the breakwater and other Government purposes Mahara R.H , 8½ m. by road from Colombo, is a delightful resort for travellers

Gampaha Stn. (16½ m). Here is one of the most beautiful model garden towns in Ceylon ¼ m from the station is a Government Botanic and Experiment Garden, opened in 1876 for the cultivation of the first para rubber plants introduced into Ceylon Seeds of the *Hevea Brasiliensis* were brought from the Upper Amazon and germinated at Kew The original trees, as well as the second and third generation, may be seen here Here may be seen Gambier (*Uncaria gambier*), also a caoutchouc-yielding shrub of Malaya, which thrives and produces seed here, though not at Peradeniya, also species of rubber-producing lianas (*Landolphia*), the valuable drug ipecacuanha, which thrives in the moist tropical heat here to an extent not known at higher elevations A female specimen of the "Double Coconut" (Coco de-mer), planted in 1884, flowered and set fruit here in 1915 for the first time in Ceylon A portion of the original jungle of the low country of Ceylon has been preserved in the Garden

3 m from the next ry stn, *Veyangoda* (23½ m), is the Rock Temple of Warana, to the E. of the Kandy Road

35 m **Ambepussa** station (R H) The line here enters the lower hills The soil is very suitable for coconuts, but malaria prevails.

46 m. **Polgahawela Junction** station, R (R.H commodious), altitude 241 ft above sea-level. 2 m. from here are a large Buddhist monastery and temple, at Denagomuwa. Polgahawela is the junction for **Anuradhapura**, **Jaffna**, and **Kankesanturai** in the extreme N. of the island (Route 7), with a branch from Madawachchiya (p 749), to **Talaimannar** (through train and steamer for Dhanushkhodi on S. Indian Ry).

8 m. S. of Polgahawela is **Kegalla** (R.H.), a small town in a most lovely situation, and encompassed by the most delightful scenery Hdqrs of the Asst Govt Agent of the Kegalla Dt. of the Sabaragamuwa Province

53 m **Rambukkana** station (R H.) Here the ascent of the "Incline" commences at an elevation of 313 ft, and continues 12 m with a gradient of 1 in 45 to an elevation of 1698 ft The vegetation is here of great richness and beauty

65 m **Kadugannawa** station is at the top of the pass A precipice is called "Sensation Point" Two tunnels (one of them a very long one) secure immunity from rock-falls, which, during the monsoons, interrupted through-communication Near the top of the incline a road made by Sir Edward Barnes is seen on the right, winding up the hill The two roads reach the summit of the pass at the same spot, and there a column (a copy in brick of the Duke of York's Column in London) has been erected to the memory of Captain Dawson, the engineer of the first road Just over the station is the Hill of Belungala (the Watcher's Rock), 2543 ft. above sea-level, from which, in the troubled days of old, a watch was kept to report an enemy advancing from the plains

A rail motor service runs from Kadugannawa to Kandy and Matale (p 750).

71 m **Peradeniya Junction** station. This place is 136 ft lower than the top of the pass The main line continues S, whilst the branch line to Kandy and Matale strikes N Half a mile from the junction is New Peradeniya station (R.H., ½ m.) where, if the visitor is pressed for time, he should arrange to have a carriage waiting for him, drive round the Botanic Gardens, and proceed to Kandy.

New Peradeniya Station The Royal Botanic Gardens at Peradeniya are one of the modern Seven Wonders of the World, 3½ m from Kandy. Their chief features are the enormous clumps of giant bamboo, the extensive and well-kept lawns surrounded by magnificent specimens of trees, the avenues of palms (Talipot, Palmyra, Royal palm and Cabbage palm) and the specimens of *Ficus elastica*, with its enormous buttressed roots Approaching the Gardens, on the right is a row of the beautiful tree *Amherstia nobilis*, the most beautiful of flowering trees Opposite, on the left approach, there was for upwards of seventy years a striking landmark in a row of Rambong rubber trees (*Ficus elastica*), which, dying from old age, were replaced by a row of young plants of the same species in 1914

On entering, is an oval lawn studded with beds of cannas of new varieties To the right is the Spice Collection, including very fine nutmeg trees over eighty years old, also cloves, cinnamon, allspice, vanilla, cardamom, ginger, etc. The Main Central Drive is bordered on either side by a sloping bank of mixed tropical foliage and flowering shrubs, etc., and shaded by tall trees in the background. Branching off to the left at right angles is the Monument drive, leading to the Gardner Monument, and passing through a young avenue of the interesting "Double Coconut" palm (Coco-de-mer). Opposite to this, on the right, is the short but shady Liana drive, along which are

to be seen fine specimens of tropical climbers, including the climbing rattan palm (*Calamus*) and the curious chain-like stems of *Bauhinia anguina* and the *Monstera deliciosa* of Mexico with perforated leaves and edible fruit

At a circle with a tank in the centre containing interesting water plants, the visitor should stop to visit the Floricultural section, Orchid House, Octagon Conservatory, Fernery, the pergolas of the curious flowered *Aristolochia* (Fly-catchers), and other flowering climbers

Returning to the central drive and continuing, a collection of tropical fruit trees is passed on the left, also close to the drive a row of young Talipots—the Majestic palm On turning the loop of the drive, note on the left some very large specimens of the *Inga Saman* or Rain-tree of tropical South America These were introduced about 1850, and are the parents of trees along the road-sides throughout the Island Next to these, close to the drive, is a row of the Cannon-ball tree, also of S America, bearing along the stem a profusion of curiously shaped flowers in March and April, followed by large brown fruits resembling cannon-balls

Behind are the Nurseries, and a row of the buttressed tree known as Java Almond (*Canarium commune*). Farther on, on the left, is a straight avenue of Palmyra palm, which is indigenous to the dry region of Northern Ceylon, where the Palmyra palm is equal in usefulness to the coconut in the wetter areas

The drive now passes through an avenue of the Cabbage Palm (*Oreodoxa oleracea*) planted 1905, skirts the Arboretum and follows the river-bank Glimpses may be obtained across the river of Gangaruwa hill and valley.

The Great Circle is a lawn with a group of palms in the centre Here the first Rubber Exhibition ever held took place in 1906 Extending to the North is a straight avenue of the Royal palm (*Oreodoxa regia*), planted 1898 Round the circle are many fine trees, some planted by Royalties, including one each by King Edward VII, King George and Edward, Duke of Windsor

On the way back the Central Drive may be followed to where two roads diverge off on the right These lead to the Office of the Botanist of the Department of Agriculture, herbarium, economic museum and laboratory The museum is open to the public and contains botanical exhibits as well as agricultural products

Returning the Great Lawn is passed on the right, the Fernery and Floricultural section on the left Turning to the right on the Monument Road and turning to the right again, a row of the fine foliaged and flowering tree (*Jacaranda ovalifolia*) is passed on the hillside to the left Reaching the river drive by the short loop to the left, a good view of the river and the bamboos fringing its banks is obtained On the right an avenue of the golden *Cassia Multijuga* of Guiana, planted 1932, is at its best in August-September The small lake now reached contains interesting water plants, including the Egyptian Papyrus and the Giant Water-lily (*Victoria regia*)

The main drive enters the new Palmetum, planted in 1916 Here is a young avenue of the Talipot palm, the giant of the palm tribe planted 1930, to replace some famous specimens Behind the avenue is a collection of medicinal herbs of value to the Vederala and Ayurdevic Institutions. The

Pinetum, enlarged in 1919 and again in 1930, is one of the best conifer collections in the Tropics At the end of the Talipot avenue is the New Students' collection of herbaceous plants formed in 1935. Beyond the crescent is a collection of Bamboos and screw-pines (*Pandanus*) Here a glimpse may be obtained of the three-spanned iron and concrete bridge which displaced in 1906 the famous one-spanned Satinwood Bridge (A model of the latter is in the South Kensington Museum)

The tour ends by returning to the Main Entrance along the Lake drive bordered by the Shoe Flower (*Hibiscus rosa-sinensis*) on the right, and on the left by the Okari (edible) nut of New Guinea, the deadly Upas tree and the Cadjuput, oil from the bark of which is used for rheumatism

Crossing the river by the ferry to the Central Experiment Station at Gangaruwa, areas of tea, coffee, cacao, rubber, coconuts, rice and vanilla may be seen, and smaller plots of various fodder grasses and other plants of economic importance in the tropics.

Tapping and manurial experiments with Para rubber are of importance to the rubber industry of the Colony, while the advantages of growing leguminous shrubs between the tea has been clearly demonstrated Experiments with cacao and coconuts are conducted, and comparative trials of rice and other economic plants carried out The remains of an old Portuguese Fort are maintained in good condition.

The collections in the laboratories of the Dept of Agriculture may be inspected by arrangement

Near the gates are the Kandy race-course and golf links

75 m. **KANDY** station * (Junction for Matale, p 750) The capital of the former kingdom of Kandy, 1602 ft above sea-level.

History —The first authentic mention of Kandy as a city is in the Sagama inscription of the 14th century In 1542, according to the Mahawansa Chronicle, it became the seat of Vira Vikrama, king of the up-country, but it became the capital of the island under Vimala Dharma Suriya I after the destruction of Kotta and the defeat of Raja Sinha I of Sitawaka in 1592 During the wars with the Portuguese and Dutch, Kandy was so often burned that scarcely any of the ancient buildings, except the temples and the royal residence, were remaining when the British took it in 1815. A small detachment of British troops was massacred soon after the first capture of Kandy in 1803 memorial stones mark the site

The old *Palace*, part of which is occupied by the Government Agent of the Province, consisted of a number of buildings scattered over the area behind the Temple of the Tooth and along Malabar Street, so called from the dwellings of the " Malabar " or Tamil relatives of the later kings The improvement of the city was undertaken subsequent to 1803 by the last king, Sri Vikrama Raja Sinha, by whom the Octagon, the main Portico of the Palace (now leading to the Maligawa Temple), and the lake, were either completed or commenced In the Temple, the sacred tooth is deposited. Kandy was headquarters of the South East Asia Command

Description —Kandy is on the banks of a small artificial lake, overhung on all sides by hills. A road called Lady Horton's Walk

winds round one of those hills, and on the E. side, which is almost precipitous, looks down on the valley of Dumbara, through which the Mahaweli-ganga rolls over a channel of rocks, "presenting a scene that in majestic beauty can scarcely be surpassed" In a park at the foot of this acclivity is the Pavilion of the Governor, erected *c.* 1835

The **Dalada Maligawa**, or "Temple of the Tooth," stands with its back against a wooded hill; at its feet lies the long moat or tank, alive with tortoises, and crossed by a small bridge, flanked by two carved stone elephants Above, an enclosing battlemented wall looks over the greenest grass dotted over with trees.

In the centre of the courtyard is the sacred building On a lotus flower of pure gold, hidden under seven concentric bell-shaped metal shrines, increasing in richness as they diminish in size, and containing jewels of much beauty, now reposes the sacred relic, which is taken in procession in the month of August for a week. Some sixty elephants take part, and there is a Kandyan dance in gold robes

The "sacred tooth" is said to have been brought to Ceylon in the reign of Sri Meghavanna, 304–332 A.D (according to Geiger, 352–379 A.D.), in charge of a Princess of Kalinga, who concealed it in the folds of her hair It was taken by the Pandyans about 1283 A.D, and again carried to India, but was recovered by Parakrama Bahu III Later on the relic was at Kotta, but in 1560 was discovered by the Portuguese at Jaffna, taken to Goa by Don Constantine de Braganza, and burned by the Archbishop in the presence of the Viceroy and his court. The Buddhists insist that the real tooth was hidden and is the one now at Kandy. This is a piece of discoloured ivory, 2 in long and less than 1 in. in diameter, resembling the tooth of a crocodile rather than that of a man There is some evidence to show that Kandy, as well as Kotta, boasted of a tooth relic in the early 16th century There are many other jewels and ornaments of interest in the shrine, the brazen doors of which merit observation The eaves of the projecting roof, the massive supporting pillars, corbels, and ceilings are profusely decorated in bright colours with painted figures, grotesque monsters, and floral patterns Adjacent to the Temple the Octagon contains the Oriental library

The **Kachcheri**, the District Court, and the Supreme Court form three sides of a rectangle The audience hall of the Kandyan Kings (erected 1784–1820) now serves as a Supreme Court House, the carving of the wooden pillars is notable. Near the Kachcheri is the **Kandy Museum**, located in an ancient building. At the Kandyan Art Association, in Victoria Drive, ancient Kandyan arts are practised, and articles in silver, copper, brass, ivory, etc, are for sale at reasonable prices

An interesting excursion may be made to two Buddhist temples **Lankatilaka Vihare** (4 m. from Peradeniya) was built in 1344: it looks like a Norwegian wooden church. **Gadaladeniya Vihare** of the same date is ¼ m off the Peradeniya-Kadugannuwa road, at a turning 2 m from Peradeniya on the left (Consult Cave's *Book of Ceylon*, Colombo, 1913, which contains a chapter by the late Mr J. P. Lewis, on Kandyan architecture.) Cars can proceed within ¼ m of Lankatilaka.

There are many pleasant drives and rides to be taken in the neighbourhood of Kandy, the Upper Lake (or Gregory's) road,

Lady Blake's drive, Lady M'Callum drive; the extensive plantations of cacao on the banks of the Mahaweli-ganga, a few miles below Kandy, deserve a visit

Excursions.

(1) To **Kurunegala**, (N W) *viâ* the (16 m.) **Galagedera** (R.H) **Pass** and **Wenda** (R.H), where there is good snipe-shooting in season

(2) To (15 m E) **Teldeniya** (R.H.). 6 m. from here is the **Medamaha Nuwara Peak**, on which is an old Sinhalese Fort and City of Refuge Near the *20th mile is visible a pillar on the* right, marking where the last King of Kandy was captured by the British troops. The road leads on

(3) To **Madugoda** (R.H.), thence by a road (small cars only) to **Weragamtota** (R H), in the Central Province. After this the view Eastwards is one of the finest in the Island The Mahaweli-ganga is crossed by a ferry (not fit for motors) to **Alutnuwara** (see p 737), in the Uva Province The traveller is now in the Bintenna country The straight course due north taken by the river is remarkable

Burrows' *Visitors' Guide to Kandy and Nuwara Eliya*, also Dr Willis's guide-book, may be consulted with advantage

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ROUTE 2.

COLOMBO TO NUWARA ELIYA, BANDARAWELA, BADULLA, and BATTICALOA

(*Rail to Nuwara Eliya and Badulla, motor-omnibus service to Batticaloa*)

This route to Peradeniya junction is the same as Route 1.

(There is a sleeping-car on the night mails between Colombo and Nanu-oya)

From Peradeniya the line continues S. to 79 m **Gampola** (1573 ft) (R H) From here a road runs S.E to Nuwara Eliya (see p 734)

88 m **Nawalapitiya** (1913 ft), whence a road leads to (22 m.) Talawakelle (see below)

From that point the stations are on a constantly rising level to

109 m **Hatton** station,* 4141 ft. above the sea.

At Hatton roads from Nawalapitiya Dickoya (including Maskeliya and Bogawantalawa) and Talawakele meet.

The drive (12 m.) to **Talawakele** (3932 ft) is very pleasant (see p. 734) Good views of the very pretty *Devon Falls* and the magnificent *St Clair Falls* Motor-lorry leaves Talawakele for Diyagama (17 m) both morning and evening. (See Horton Plains, p 735)

From Hatton the ascent of **Adam's Peak** (7300 ft), the most celebrated, though not the highest, mountain in Ceylon, is most easily made. The wonderful shadow cast by the peak at sunrise is a sight which will repay the trouble and fatigue. Camoens, the Portu-

guese, mentions it in his *Lusiads* The manager of the Adam's Peak Hotel at Hatton makes all arrangements for the visitor. A moonlight night is generally chosen. It is a very beautiful drive of 12 m. to Maskeliya (4200 ft) and 14 m to **Laxapana** (Raksapana). From here it is 8 m to the top, the first five fairly easy going, and the last three rough, though the worst places are protected, and chains of very old date facilitate the scramble to the actual summit Stout boots and warm clothing are needed for the trip, and blankets should be taken up from the hotel—also means of making tea on the summit, which is only 150 ft sq, where a few Buddhist monks live Under a wooden canopy is the sacred object of the pilgrimage—an impression of the foot of Buddha on the natural rock It is about 5½ ft. long and 2¾ ft broad, and varies from 3 in to 5 in in depth

Hatton is also the point from which the great tea-districts of **Dikoya** and **Dimbula** may be most conveniently visited. These valleys were celebrated for their production of coffee, but are now entirely devoted to tea cultivation. About the year 1870 the coffee plantations were attacked by a new fungus, *Hemileia vastatrix*, which in ten years' time reduced the planting community to a state of ruin, but they set to work to remedy the disaster, and by the substitution of tea and rubber for coffee have thoroughly succeeded in doing so. In 1875 only 282 lb. of tea were exported from Ceylon, now over 200,000,000 lb.

The **Dikoya** Valley (Kandy District) is the site for a hydro-electric scheme. It is proposed to dam the river Kehelgamu-oya at Norton, and erect a power-house at Horowalatenna on the E. bank of the Maskeliya-oya

Dikoya is on the motor-bus route from Hatton to Norwood, and there is another service from Norwood to Maskeliya.

The valley of **Maskeliya** is separated by a ridge from that of Dikoya, to which it is parallel. The Dimbula valley is traversed by a road from Nawalapitiya to Nuwara Eliya, into which a branch road from Hatton leads

On leaving Hatton the train passes through the longest tunnel on the railway Just after the 114th mile the very fine *St Clair Falls* are seen on the left (see p 733)

117 m **Talawakele** station (R H) Motor-bus service, 14 m, from Agrapatna The Tea Research Institute (1925) is open on the second and last Wednesdays of each month

The Horton Plains (see p. 735) may be reached by this route, by motor-coach to **Diyagama** (17 m), thence on foot or horseback (8 m).

From Talawakele the line again rises steadily to

129 m **Nanuoya** junction [1] (5291 ft) This is the junction for the narrow-gauge railway, which rises 1000 ft. in 6¾ m, to **Nuwara Eliya** (135 m.) and runs on to **Rágala** (148 m.) There is (4½ m.) a good road, and a motor-car to meet the train at Nanuoya can be obtained from the Grand Hotel or Public stand at Nuwara Eliya.

4½ m. **NUWARA ELIYA** ✱ the sanatorium of Ceylon, is 6199 ft

[1] Travellers are recommended to have warm wraps with them, as the temperature here is very much lower than that of the plains, or even of Kandy.

above the sea-level. The summer residence of the Governor (Queen's Cottage), the Hill Club, and Hotels are to the N.W of the lake Much of the ground about Nuwara Eliya is open and moor-like, and is thickly dotted with bushes of crimson rhododendron The cypress and the golden wattle have been largely planted about Nuwara Eliya, and the landscape has a somewhat Italian air imparted to it by the numerous *Kina* trees (*Calophyllum tomentosum*), resembling a stone-pine

Nuwara Eliya has a beautiful park and one of the finest golf-courses in the East Cumberland turf imported for the grounds of Queen's Cottage has seeded and spread The Lawn Tennis Championship at the Hail Club Courts was revived in 1946 It is also the headquarters of the Ceylon Fishing Club The streams are well stocked with rainbow trout, which afford good sport (licence from Assistant Government Agent) in the open season (May-October)

Of expeditions of all sorts [1] the finest are —

(1) Round the *Moon Plains*, 5 m (2) To the top of *Ramboda Pass* and back, 3 m. (3) Round the *Lake*, 6 m. To Hakgala (see below), 6 m. *Pidurutalagala*, the highest mountain in Ceylon (8292 ft), may be easily ascended from Nuwara Eliya There is a bridle-path to the top, whence the view is extensive

(4) A longer excursion is that to the **Horton Plains**, 18 m. from Nuwara Eliya (see also under Talawakele, p 734), *viâ* Blackpool and the Elk Plains The easier route is by train to Pattipola, and thence by foot or on horseback: distance 6½ m

This excursion will take a day, and can be made on horseback. A bridle-path terminates at a large R.H., in the neighbourhood of which are tremendous precipices, which descend to the great plain of the Kalu Ganga At the "World's End," ¾ m easy walk from the R H, along a charming jungle path, there is a very striking view The mountains, **Totapola** (7741 ft) and **Kirigalpota** (7142 ft), may be ascended from here The path to the summit of the latter (about 2 hrs from R H) is somewhat difficult, a guide should be taken The view is magnificent

(5) A drive out to **Kandapola** (6½ m) is very agreeable on a fine day

(6) The **Botanic Gardens** at **Hakgala**, 6 m (see below on road to Badulla)

From Nuwara Eliya the traveller may return to (35 m) Gampola (p 733) by the Ramboda Pass (motor-bus from Gampola to Nuwara Eliya) The pass is negotiated by a series of zigzags Several pretty waterfalls are seen at (15 m) **Ramboda** (R H).

Just before entering Gampola the Mahaweli-ganga is crossed by a bridge, built 1927

The drive from Nuwara Eliya to Badulla is extremely picturesque There is a motor-bus service to Hakgala and Welimada (see below)

On leaving Nuwara Eliya the road to Badulla rises after quitting the lake, and then commences a very steep descent of several thousand feet At 6 m from Nuwara Eliya we reach the *Botanic Gardens* at **Hakgala** (which derives its name from the resemblance the bare rock above has to a human jaw), a visit to which ought on no account to be omitted by any one making a stay, however short, at Nuwara Eliya The visitor is equally repaid by the beauty of the views from the gardens, and by the

[1] Burrows' *Visitors' Guide to Kandy and Nuwara Eliya* is a useful handbook

beauty of the gardens themselves, in which all the flowers and plants of temperate climates flourish freely, combined with much beautiful natural vegetation. Behind the Hakgala gardens rises the precipitous wall of bare rock which forms the face of the Hakgala mountain, whilst in front the ground sinks abruptly to valleys and low hills far below, and backed in the distance by the mountains of Uva A distant view of the camp at Diyatalawa (below), where the Boer War prisoners were confined, is to be had from the gardens.

The road descends to (13 m) *Wilson's Bungalow* and to **Welimada** (R H), from which a public road branches off to the right to Bandarawella (13 m)

26 m. **Ettampitiya** (Atampitiya), on the same level as Wilson's Bungalow Terrace-cultivation is practised, the steepest hillsides being fashioned into a series of narrow terraces, carefully irrigated, on which abundant crops of paddy are grown From Ettampitiya the road again falls continuously, until, after passing **Dikwella**, where it is joined by the road from Bandarawela, it reaches (37 m) Badulla (see below)

Nanuoya to Badulla by Rail.

The main railway from Nanuoya continues to

140 m. (R H) **Pattipola** station. A bridle-path (6 m.) leads to the Horton Plains (see p 735). Shortly after the train reaches the summit level (6224 ft.). It then enters a tunnel, and emerging, a most magnificent view of the Uva country is disclosed with dramatic suddenness to the left.

154 m. **Hapatale** station (4583 ft.) (R.H.) (see p. 741).

158 m. **Diyatalawa** station (4367 ft.). Below, to the left, is seen the Boer Camp, where about 5000 prisoners were confined during the South African War. It is used as a sanatorium for sailors on the East India Station.

161 m. **Bandarawela** station (4036 ft) (Hotel)

About 10 m. from Bandarawela are the headquarters of the Errebodde Hunt Club, where the jackal is hunted from October to January. Particulars may be obtained at the Hill Club in Nuwara Eliya.

5½ m out of Bandarawela, on the way to Badulla, a road breaks off to the right to (7½ m) Ella, where there is a R H most beautifully situated The traveller may continue by this road to (18 m) Passara (see p 737) through very fine scenery.

182 m **BADULLA** station, alt 2225 ft (R.H), the capital of the Province of Uva, one of the oldest, most cheerful, and most attractive towns in Ceylon It is situated in a hollow entirely surrounded by green paddy-fields, and in the immediate vicinity of a fine river, while on all sides the background is formed by mountains of very beautiful outline.

Fine avenues of *Inga samon* and other trees adorn the town, which has a pretty race-course surrounding a small lake It is in the centre of a very flourishing group of tea-estates. The church, the nave of which was built by subscriptions from Kandyan chiefs to the memory of Major Rogers administrator and sportsman, and the old garrison burial-ground, containing a tomb of 1817, uplifted by a Bo-tree, merit a visit.

The fine Dunhinde Waterfall is only 3½ m. away, but is rather difficult of access.

Of the ancient city not a vestige is to be seen of the palace of the kings, and scarcely any indication of any buildings of considerable antiquity There are, however, two large and wealthy Buddhist temples, the *Mutiyangane Vihare* and the *Kataragama Dewale* of no very great age They occupy ancient sites, and the dagoba at the Mutiyangane Vihare is undoubtedly of very early origin

A very interesting excursion may be made from Badulla to **Alutnuwara**, 30 m N, on the Mahaweli-ganga, where there is an ancient dagoba in the midst of fine scenery Alutnuwara is better reached from Kandy, and one of the views on that route at the head of the sudden descent to the great eastern plain is among the finest in Ceylon (p 733).

Badulla to Batticaloa by road.

Batticaloa is accessible by rail *viâ* Maho Junction on the line to Jaffna (Route 7), but the motor-coach route from Badulla will probably be preferred. The distance is 103½ m

Leaving the railway at Badulla, the road, which passes chiefly through tea-estates, rises rapidly to Debedda Gap (3800 ft.) and then falls to

12 m. **Passara**, 2900 ft. (R H.), with Namunakali Hill (6641 ft) on the W. A short road to Bandarawela by Ella leads through beautiful scenery (see p. 736)

Proceeding, the road continues through some of the finest scenery in Ceylon to

25 m. **Lunugala**, 2450 ft. (R.H.). Nothing can exceed the beauty of the drive between this place and

36 m **Bibile**, 800 ft. (R.H.), a good starting-point for excursions into the wild country to the E. and S (see p 762). There are some springs of warm water near here. Either here or at the next following Rest-houses,

47½ m from Badulla iron bridge **Ekiriyankumbara**, 500 ft , or

57 m. **Galodai** (*Kallodai*), 320 ft , the traveller is likely to meet Veddas They are a remnant of the aboriginal inhabitants of Ceylon, and are divided into two classes—the Rock and the Village Veddas The Rock Veddas are absolute savages, who remain concealed in the forests the type is fast becoming extinct The Village Veddas, though often indulging their migratory instincts, live in collections of mud and bark huts, in the vicinity of which they carry on some rude cultivation (see *Wild Ceylon the Present-day Veddas*, by R L Spittel (*Colombo*, 1924)).

67 m **Maha Oya**, 200 ft. (R H., on the borders of a tank, with excellent shooting in season). At Unuwatura Bubula, 3 m. off, is a spring of *hot* water.

80 m **Tumpalancholai**, 100 ft

83 m a road to left leads to **Rukam Tank**, about 1½ m., restored by Sir H Ward, and now irrigating a large tract of country.

From Bibile to Kumburuwella the traveller passes through what is known as the Bintenna country.

where good shooting may be had in season.

93¼ m **Chenkaladi** (R.H.). We have now entered a country almost wholly inhabited by Tamils and "Moors," Ceylon Muslims. The Buddhist dagoba is no longer seen in the villages, and its place is taken by the Hindu temple or the mosque. From Rukam onwards the country is highly cultivated and populous.

At Chenkaladi the road from Badulla joins the North Coast road; distance to Trincomalee, about 74 m. (eight ferries to be crossed).

Mutur (small Rest House, on the S. of Koddiyar Bay, about 57 m. from Chenkaladi, is famous as the scene of the capture of Robert Knox, the author of *An Historical Relation of the Island Ceylon, by Robert Knox, a captive there near twenty years* (1660-1679), published in 1681 (reprint, Maclehose, 1911).

From Chenkaladi the road turns sharply to S.E. to

103½ m **Batticaloa** (R.H., Tamil) is on an island in a remarkable salt-water lake, which extends for over 30 m. in length by from 5 m. to 2 m. in breadth, and is separated from the sea by a broad sandy belt now rich with coconut groves, and swarming with Tamil and Moorish villages. The approach to the town by a causeway across the lake is picturesque. The walls of the small old Dutch fort are well preserved.

Batticaloa is famous for the "singing-fish." On calm nights, especially about the time of the full moon, musical sounds are to be heard proceeding from the bottom of the lagoon. They resemble those which are produced by rubbing the rim of a glass vessel with a moistened finger. As a rule not more than two distinct musical notes are heard, one much higher than the other, but credible witnesses, such as Sir E. Tennent, assert that they have heard a multitude of sounds, "each clear and distinct in itself, the sweetest treble mingling with the lowest bass." The people attribute the production of the sound to the shell-fish *Cerithium palustre*. This may be doubtful, but it is unquestionable that the sounds come from the bottom of the lagoon, and may be distinctly heard rising to the surface on all sides of a boat floating on the lake. If a pole be inserted in the water and its upper end applied to the ear, much louder and stronger sounds are heard.

The edible oyster is good and plentiful here.

The Tamils call Batticaloa "Tamarind Island," from the graceful tamarind tree which is frequently seen.

A motor-bus runs daily between Batticaloa and Badulla. There is another service from Batticaloa to Trincomalee.

From Batticaloa there is a good road for some 77 m. to Panama, thence by track to **Palutupana** (p. 746), through the *Yala Game Sanctuary*.

The railroad from Batticaloa to Galoya Jn., on the branch line from Maho Jn. to Trincomalee (Route 7), passes through Polonnaruwa and Minneriya (p. 758).

ROUTE 3.

COLOMBO TO RATNAPURA and BANDARAWELA

Rail to Avisawella, Ratnapura and Opanake, thence by motor omnibus to Hapurale (p. 741), and thence rail to Bandarawela, or, *alternatively*, by motor omnibus the whole way. As the drive is a beautiful one, the road to Avisawella is described in place of the railway (narrow gauge).

For convenience of arrangement this route has been described from Colombo to Bandarawela. The long ascent, however, takes time, and the traveller who has not much leisure is recommended to go to Bandarawela by railway (Route 2), and to return to Colombo by this route.

No excursion could show more of the characteristic features of Ceylon scenery and life than this. It is one strongly recommended to those having time to perform it. The journey to Bandarawela will occupy about three days — one day by train. Those with less time should go as far as Ratnapura, returning to Colombo by the alternative route (No. 4) mentioned on p. 742. To Ratnapura and back by alternative route will occupy more than a day. At **Colombo Fort** the narrow-gauge Kelani Valley Railway (87 m. to Opanake) begins.

Leaving Colombo through narrow and crowded streets of the "Pettah," a very pretty road along the S. bank of the Kelani River may be followed, or a more direct but less picturesque road across the plain to

10 m **Kaduwella**, a R.H. charmingly situated on a bluff of red rocks above the river at a point where it makes a sharp turn. The R.H. veranda all but overhangs the river, and commands a delightful view, enlivened by the constant passage of leaf-thatched barges and sailing-boats, and by the picturesque groups all day crossing the river at the ferry close by. A short distance off is an ancient Buddhist temple of some size. There is also the Irrigation Tank of Mullériyawa, in great disrepair. The road continues near the river, through a rapid succession of villages and groves, to

21 m **Hanwella** (R.H.), a large village with a R.H., commanding a beautiful view up and down the river and situated on the site of a Portuguese fort. 9 m. S. of Hanwella is the tank of Labugama, which supplies Colombo with water. It is picturesquely situated among wooded hills.

The road leaves the Kelani River and passes through country in which rubber alternates with coconut, whilst here and there are patches of tea, to Puwakpittya and

30 m **Avisawella** Jn. station (R.H.), surrounded by country of very great natural beauty, centre of the rubber industry and site of the Kelani Valley Planters' War Memorial. The ruins of a royal palace and a temple destroyed by the Portuguese in the 16th century are still to be seen on the opposite bank of the river, reached by an iron bridge.

The railway branches here, one section leading to **Yatiyantota** (R.H.), and the other to Opanake. A road N. from Avisawella crosses the Sitawaka and Kelani Rivers by fine iron bridges, both commanding lovely views, and passes, by **Ruwanwella** (where there is an old Dutch fort converted into a very charming R.H.), through a lovely wooded and undulating country to **Kegalla** (p. 729).

44 m. **Pussella** The road crosses the Kuruwiti River near the village of Ekneligoda—in which is situated the *walawa* (residence) of the late Ekneligoda Dissawe, a great Sinhalese chief and landholder—and reaches

56 m **Ratnapura** (R H.), the capital of the province of Sabaragamuwa, with an average rainfall of 155 in Ratnapura is situated in the midst of the most exquisite scenery, and the views from the summit of the fort, the bridge, and the circular road are especially recommended. A ride or drive of a few miles up the road leading from the bridge to Gilimale will amply repay the trouble, revealing as it does the magnificent mountain-wall which rises all but perpendicularly to the N. From Ratnapura the finest views of Adam's Peak are to be obtained. There is a specially good one within a few minutes' walk of the R H.

Ratnapura (City of gems) is surrounded by pits from which gems have been removed Sapphires, topazes, and cat's-eyes are those most commonly found. The *modus operandi* is simple. A pit is dug, and when the *illan*, a peculiar gravel in which the gems are usually found, is reached, all that is dug up is carefully washed and sifted, and the good stones set aside *Genuine* stones are certain to be found in large quantities, but stones of any marketable value are more rare, the greater part having only a faint shade of colour, and being disfigured by flaws Plumbago also is mined

A mile or two W from Ratnapura is the *Maha Saman Dewale*, one of the richest Buddhist temples in Ceylon, and possessed of considerable estates Some interesting relics are preserved there, but the building itself, though picturesque, has no architectural interest. In the outer court, built into the wall, stands one of the very few monuments of the Portuguese domination remaining in Ceylon—a slab representing the full-length figure of a Portuguese knight in armour killing and trampling upon a prostrate Sinhalese There is also a round-arched gateway, supposed to be Portuguese

The **ascent of Adam's Peak** (23 m.) can be made by the following route (but see p 733) —

5 m from Ratnapura is **Malwala**, on the river *Kalu Ganga*.

2 m farther up the river is Gilimale, a large village (horses as a rule cannot proceed farther)

5 m **Palabaddala**, 1200 ft., halting-station of pilgrims Light cars can run from Malwala *viâ* Carney Estate to Palebbada only 3 m from here The path becomes very steep and rugged.

8 m **Heramitipana**, 4400 ft., halting-station at the base of the peak.

3 m. farther is the summit of the mountain (7353 ft), where is a supposed imprint of the foot of Gautama Buddha

Leaving Ratnapura by the bridge, and not forgetting to notice the beautiful views obtainable from it, the road passes through paddy-fields fertilised by the Batugedara irrigation works, and after a drive of 12 m. reaches

68 m. **Pelmadulla** (R.H.), whence a road S.E. leads to **Rakwana** (R H), the chief village of a rising tea-district The views on this road are some of the most beautiful in Ceylon Between Pelmadulla and Rakwana is Madampe, whence there is a motor-bus

service to Tissamaharama (p. 745) on the S. coast through forests.

The woods about Pelmadulla, at the proper season, are bright with the splendid blooms of the *Dendrobium Maccarthiæ*.

From Rakwana an interesting trip may be made Southwards on another road to Hambantota in the Southern province It is a riding road only, though practicable for bullock-carts in most places. As far as Maduwanwela the scenery is very pretty.

At Maduwanwela is the only one known of the ancient *walawas* of the Kandyan Chiefs It consists of several small courts built on a sort of Pompeian plan, the small rooms looking into the court, which, as at Pompeii, is in every case furnished with an impluvium There is a small private chapel (Buddhist), and the massive outer door, made of one huge piece of wood, is marked by bullets and other traces of resistance to assailants in older times Within is displayed the silver staff shaped like a crozier, the badge of office of one of the ancestors of the family, who was chief Adigar or Prime Minister of the King of Kandy.

Beyond, the track leads chiefly through thick forest, a great resort for elephants and deer After passing the irrigation works on the Walawe River, the main road between Galle and Hambantota is joined at Ambalantota (see p 745).

84 m. **Balangoda** (R.H.). Nothing can exceed the beauty and variety of the scenery along the whole road from Ratnapura to this place. It is entirely free from monotony

94 m. **Belihuloya**, 1900 ft. (R.H. overlooking the stream from the Horton Plains), to which spot an ascent can be made The road leads into tea-estates, whence the whole of the wood has been cleared, and the bare hillsides now lack all trace of their original beauty.

From Pelmadulla the road, varied by occasional descents, has been rising, and by the time it has reached

105 m. **Haldummulla**, 3350 ft. (R H.), a magnificent view is obtained over all the country lying between Haldummulla and the sea to the S

From Haldummulla the traveller may proceed E to **Koslande** (R H.), thence, passing the very fine **Diyaluma Waterfall**, nearly 500 ft high *en route* to **Wellawaya** (R H) Tellula (R H), some 10 m. to the S on the Hambantota road, is the nearest point possible for a shooting headquarters From Wellawaya the road runs E. to Pottuvil

Another steep road of about 8 m ascends to the top of the pass at Haputale (R H.), on the railway line, at an elevation of 4583 ft The view hence is even grander than that from Haldummulla By road (or rail) the traveller proceeds to

120 m. **Bandarawela** (Hotel) (p. 736), which is said to enjoy the best and most equable climate in Ceylon A road through Welimada leads 30 m. to Nuwara Eliya.

ROUTE 4

COLOMBO TO RATNAPURA *vid* Panadure and Nambapane.

(Rail and road.)

This is an alternative route to Ratnapura, but somewhat longer. It passes through very pretty country, and those who go no farther than Ratnapura are strongly recommended to go by one and return by the other of these routes The traveller proceeds to *Panadure* by Railway (see Route 5), and completes the journey to Ratnapura by motor-bus (3¾ *hrs*).

A few miles after quitting Panadure the Bolgoda lake is crossed by a bridge, and at

10 m. **Horana** is reached. The R.H. here is built among the remains of an ancient Buddhist monastery, and on the opposite side of the road is a large and handsome Buddhist temple It contains a bronze candlestick worthy of notice It is about 8 *ft high*, and of remarkably fine workmanship

28 m **Nambapane** (R H), prettily situated. The road here follows the Kalu Ganga River as far as the Kuruwiti River, which it crosses. The road now keeps at a greater distance from the river, though it follows its general course till it reaches

42 m. **Ratnapura** (R H) (see p. 740). Shortly before arriving at Ratnapura the Maha Saman Dewale is passed (see p. 740). The whole road is extremely beautiful. Fine views of Adam's Peak and the other principal points of the Central Mountains are to be obtained on this route.

Another route to Ratnapura, by far the best for motorists, is that by the new high-level road *vid* Homagama This route is free of floods.

Leaving Colombo the route described in Excursion 4, p 726, should be followed to Reid Avenue and thence through Havelock Road, passing the Police Headquarters on the left and further the Ceylon Spinning and Weaving *Mills on the right, bearing left at* the fork to reach the high-level road on crossing the bridge over the canal The road then leads to

Nugegoda (5 m.), a suburb which is fast developing into the residential quarter of the city of Colombo. **Kotte**, the capital of Ceylon during the 14th, 15th and 16th centuries, is 1½ miles from here The road then runs almost parallel to the Kelani Valley Railway line through a very pleasant countryside to

Homagama (15¼ m.). R.H. ¼ m from road, up to date and very pleasantly situated. At the junction the road bears left—the road on the right leads to Padukka—(22¾ m.) Rly. station. R.H. good —to Mipe (22 m.), where the turn to the right should be taken, the straight road leads to (3¾ m) Hanwella (p 739) Thence the road leads through Bope (25¼ m.) and Malagala (28¾ m.) to

Ingiriya (33¼ m.), where it joins route No. 3 (p. 740) to Ratnapura (56¼ m.).

ROUTE 5.

COLOMBO TO GALLE, MATARA, Hambantota, and Tissamaharama

(Rail to Matara From Matara to Hambantota motor bus service daily, also from Hambantota to Tissamaharama)

The journey is worth making, at all events so far as Galle or Matara, for the sake of the coast scenery. The first five stations—namely, the Fort, Slave Island (the drive from Galle Face Hotel to this station is about ½ m), Kollupitiya (Colpetty), Bambalapitiya, and Wellawatta, are all in the suburbs of Colombo

At 7 m is **Mount Lavinia** station (hotel) (see p 727)

11½ m. **Moratuwa** station is a very flourishing place with an important College It is justly celebrated for its wood-carving

16 m **Panadure** station (R.H.) (motor-omnibus to Ratnapura; see Route 4)

26 m. **Kalutara** station (R H.) is approached by a fine steel bridge over the Kalu Ganga It is over 1200 ft long, being composed of twelve spans of 100 ft each On the site of the residence of the Asst Govt Agent was a Portuguese fort, and later a Dutch fort. The R.H is a good starting-point for the excursions which may be made over excellent roads into the very pretty country to the E, which is the premier rubber-growing area of the island. Snipe and whistling teal are plentiful from November to February. The hog-deer (*Cervus porcinus*), not found anywhere else in Ceylon, is said to have been introduced into the Kalutara District by the Dutch from its home in the Ganges Delta

The Mangosteen grows well in Kalutara Its fruit is delicious.

Plumbago, or graphite, is largely mined in the Kalutara District. Ornamental basket-, mat- and hat-weaving with the leaf of the "Indi" palm has been developed There is a Government model distillery

37 m Alutgama station for Bentota (R H very good) on the other side of the river, celebrated for its oysters and a favourite week-end resort The drive to Galle from here, generally within sight of the sea, passes under an uninterrupted grove of coconut and other trees The district is extremely populous

51 m. **Ambalangoda** station The R H (good) is close to the sea, and has a good bathing-place among the rocks below it

59 m. **Hikkaduwa** station (R H), good sea-bathing

At (7 m) **Baddegama** (R.H) is an old English church consecrated by Bishop Heber in 1825 The first sugar factory in the island was established here in 1853

63 m. **Dodanduwa** station There is a fine Buddhist temple here in a somewhat unusual position, approached by a long, narrow, and steep flight of stone stairs

71 m. **GALLE** (Portuguese) was the principal port of call for vessels between Aden and the far East, before the completion of the breakwater at Colombo The harbour at Galle is very small and difficult to make in rough weather. The entrance is so narrow as to be hardly visible until very near *The Lighthouse* is about 60 ft high To the E there is a hill 2170 ft high called the Haycock, and in the distance to the E.N.E. Adam's Peak, 7360 ft high, is often seen The Haycock is known in Sinhalese as "Himiduma Kanda" It is about 1½ m. from the Rest House at Himiduma *All Saints' Church* is about a furlong from the landing-place It is a handsome stone building of pointed architecture,

and can seat 500 persons. Adjoining is a quaint old Dutch church (1752-54), containing interesting monuments. The ramparts of the old fort form a charming promenade towards the sea

The place is supposed to be Tarshish, but is hardly mentioned in the native chronicles before 1267. Ibn Batuta, in the middle of the 14th century, calls it a small town After the Portuguese occupation (1507) it rose to importance. When the Dutch succeeded the Portuguese they greatly strengthened the fortifications, which had been vigorously defended against their Admiral, Kosten The magnificent old Dutch fort, which encloses the older part of the town, is in almost perfect preservation In the marriage treaty of the Infanta of Portugal with Charles II. of England it was agreed that if the Portuguese recovered Ceylon they were to hand over Galle to the English, but they never did manage to recover it

The name of Galle is from the Sinhalese *gala*, a rock, but the Portuguese and Dutch settlers derived it from the Latin *gallus*, a cock, and carved an image of a cock on the front of the old Government House, which dated from 1687 The present Government House is the "Residency," which is about ¼ m from the fort. The "Kerkhof" or Dutch burial-ground outside the Fort bears the date 1796

In the environs there are many old and curious Buddhist monasteries to be explored Buddhism is here seen in its best aspect. The monks are far more austere and more intelligent than in the Kandyan provinces.

The Pettah is a busy centre of native traders about ¼ m. from the fort There is an orphanage for girls known as "Buona Vista" at Unawatuna, in Talpe Pattu.

There is a large Catholic cathedral, St Mary, on Mount Calvary Hill at Kaluwella.

Akmimana is about 5¼ m. from the fort It is known as the "Gabadagama" (granary) of the Galle Four Gravets. Paddy-growing is very systematically carried on. At one time there was a sitting Magistrate here; he is said to have held Court at the old R H premises There is at present a Gansabhawa The headworks of the Galle water supply are about 2¼ m. from the Gansabhawa They are known as "Hiyare Waterworks."

Wakwella is about 5 m from the fort There is a fair R H on the banks of the Ginganga Angling and snipe shooting

88 m. Weligama station (R H), a populous and thriving village, beautifully situated on the lovely little bay of the same name Half a mile before entering the village, on the right-hand side of the high road from Galle, is a remarkable rock-cut colossal statue of a Sinhalese king in perfect preservation The statue is popularly styled that of the "Leper King," but the legends attached to it are obscure and contradictory

The road continues along the sea-shore, through an almost uninterrupted grove of coconut trees. The whole District is densely populated. The journey is worth making for the sake of the coast scenery, especially in the vicinity of Tangalla. As far as Matara it can be performed by rail The best way to see the country is to travel by motor along the coast road.

97 m. Matara station, the railway terminus, the birthplace of Sir Henry Lawrence (1806), and of Sir George Lawrence (1805). The Nilwala Ganga is here crossed by a

fine bridge Matara is the residence of many of the old and rich Sinhalese lowland families. In the fort there is a R H and a handsome clock tower.

At Matara there is a Buddhist hermitage called Chula Lanka. It is an islet connected with the mainland by a causeway, and founded as a Buddhist seminary by a Siamese Prince Priest

Motor-bus services along the coast to (51 m) Hambantota, N.E. to Hakmana, and N. to (43 m Deniyaya, a planting district in the hill-country

4 m from Matara **Dondra**, a fishing village situated on the southernmost point of Ceylon There was here a stately temple, destroyed by the Portuguese, of which few fragments now remain There is, however, in the modern vihara *a fine gateway elaborately* sculptured, and about ½ m to the N is a stone cell in perfect preservation. On the headland about 1 m to the S of the road is a magnificent lighthouse, erected in 1889.

12½ m. **Dikwella** About 1 m inland is the Wewrukannala temple with remarkable statues and tableaux. The temple is very interesting as showing the modern tendency of popular Buddhist religious art

22½ m **Tangalla** with a remarkably good R H close to the sea, a great place for catching turtles.

N. of Tangalla are the extensive irrigation works of the Kirama valley and the large tank of Udukiriwila, a few miles to the S. of which is situated one of the oldest and most remarkable Buddhist monasteries in Ceylon — Mulgirigala, an isolated rock rising abruptly from the plain, and honeycombed with caves and temples.

30 m. **Ranna** (R.H. good). About a mile before reaching it we see on the S. a picturesque Buddhist temple on the summit of a high, wooded rock

The population now becomes far more sparse, and the country is covered with scrub jungle containing peacocks

40 m. **Ambalantota** (R.H.), a small village on the banks of the Walawe River, a noble stream here shrouded in dense forest, and crossed by a long iron bridge

10 m N of Ambalantota are the headworks of the Walawe Irrigation Scheme A stone dam (1893) diverts the stream into a system of canals and channels

The road now passes through a desolate country to

48 m **Hambantota** (R H good), *on a small bay (good bathing)*. Here are the headquarters of the District, the Assistant Agent's residence, the Kachcheri, Courthouse, etc Here, too, is one of the two chief salt manufactories in Ceylon A great part of the population are Malays In the immediate vicinity of the town are sand-hills which long threatened the town Their onward progress is now checked by the growth of a peculiar grass, and by plantations of the palmyra palm Motor-bus service to Tissamaharama, *viâ* Wirawila (see below)

About 20 m N.E. of Hambantota, off the road to Wellawaya, is **Tissamaharama** (R.H.), one of the oldest of the abandoned royal cities of Ceylon. Except as a place of pilgrimage, the site had been wholly abandoned till the restoration (1897) of three tanks by the Government The ruins are of great antiquity One of the oldest and largest of the dagobas, over 150 ft high, which was in a very ruinous condition, has been entirely restored by the

unassisted labour of the Buddhist population. There are several other very large dagobas, mostly in ruins, and some smaller ones in fair condition. The remains of large buildings are numerous, and the ruins of what is styled the King's palace, but is more probably the lower storey of a many-storeyed monastery like the *Brazen Palace* at Anuradhapura (p 755), are worthy of notice They consist of rows of huge monolithic columns, much larger than any at Anuradhapura or Polonnaruwa Ruins are everywhere scattered through the dense forest.

There are two ways of reaching Tissamaharama from Hambantota—

(1) The easiest route is that by the high-road to Badulla On leaving Hambantota the great *lewayas*, or natural salt-pans, whence great amounts of salt, a Government monopoly, are annually taken, are passed They present the appearance of frozen lakes

(2) A more interesting, but from Bundala (12 m) onwards a difficult, route is along the coast 21 m. to **Kirinda**, a small port The road thence to Tissamaharama, about 8 m. in length, passes many remains of antiquity.

6 m. beyond Kirinda, along the coast, is **Palutupana**, an excellent centre for shooting excursions. In the jungle is an old British fort, erected in 1813 and called Fort Brownrigg after the Governor who laid the foundation-stone

From Palutupana there is a track, good for horses and generally passable for a rough bullock-cart, to Batticaloa (130 m) (see p 763)

ROUTE 6

COLOMBO to **Negombo**, thence, by rail or road, **Chilaw** and **Puttalam**, and by road to **Anuradhapura** and **Trincomalee**

Railway to Puttalam thence by motor-omnibus (S) Both Anuradhapura (p. 752) and Trincomalee (p 761) are accessible by rail from Colombo (See Routes 7 and 8)

9 m from Colombo, **Ragama** (p 728)

13 m. **Jaela** (R H.).

24 m. **Negombo** (two old R H, accommodation can be booked by telephone from Colombo), a true Dutch settlement situated among lagoons and canals, a Dutch canal runs to Colombo and Chilaw There is a picturesque Dutch gateway (dated 1672), and a banyan tree of magnificent dimensions The District Judge's residence is an old Dutch house, dated 1682 The brass-work of Negombo is celebrated; also its crabs and prawns. Bathing is not safe in the S.W. monsoon. The whole District between Colombo and Negombo is densely inhabited The innumerable villages are scattered through coconut groves, cinnamon gardens, and groves of jack-fruit The artist and the photographer can find many pictures

The road then crosses the Maha Oya by a fine bridge, about 400 ft. in length, and proceeds through luxuriant coconut groves and tobacco plantations to

36 m **Marawila** (R.H, good), 2½ m. from Nattandiya station Near it is an enormous Roman Catholic church. One of the most striking features on this route is the number and size of the Roman Catholic churches,

erected for the most part by the people of the fishing villages along the coast, who almost all profess that religion.

44 m. **Madampe** (coconuts Research Institute; open third Wednesday in the month), road to Kurunegala (p. 748) passing Dandagamuwa, where there is a picturesque temple.

51 m **Chilaw** (R H. good) Here is another huge Roman Catholic church A large Hindu temple at Munneseram is worth a visit.

4 m beyond Chilaw the river Deduru Oya is passed by an iron bridge. A good road, through a flat, jungle country, interspersed with coconut plantations, leads to

93 m **Battulu Oya** stn, where another large river is crossed by an iron bridge The road continues through extensive coconut plantations to

84 m. **Puttalam** (R.H. good), a terminus The Court-house was designed by Sir Arthur Gordon (Lord Stanmore), when Governor The island is mainly supplied with salt from this place or Hambantota The right season to visit is June to Sept. On the tongue of land which lies between Puttalam Lake and the sea is St Anna's Roman Catholic Church On the Saint's festival, the 26th July, enormous crowds go thither on pilgrimage—Buddhists, Muhammadans, Hindus, as well as Roman Catholics and other Christian sects.

A canal connects Puttalam with Negombo and Colombo, used for the transport of salt and copra.

Roads lead from Puttalam to Kurunegala (motor-bus service, 4½ hrs.) and along the coast to Mannar; the latter runs through very wild country, and is not much used

The road to Anuradhapura (motor-bus service, 3½ hrs) strikes inland through a jungle district There are no Rest Houses but the road is good and often used by motors

At 103 m **Kala Oya**, there is an unfurnished Circuit Bungalow of the P W D (permit from Dist. Engr, Puttalam) The *Kala Oya River* is crossed by a bridge, with a span of 165 ft, 55 ft above the ordinary level of the stream, which, nevertheless, carried away the bridge in 1885.

127 m **Anuradhapura** (Hotel) (see p 752) Railway stn Motor-bus services to (65½ m) Trincomalee in about 4 hrs

The road from Anuradhapura to Trincomalee passes through the old capital

135 m **Mihintale** (R H) (see p 756), road to Kandy (p. 731).

The road to Trincomalee (constructed 1880) passes through a thinly inhabited country

160 m **Horowupotana** (R H.) A large tank and village

177 m **Pankulam.** At Kanniya, 9 m from Pankulam, and 6 m from Trincomalee, there are seven hot springs. They are considered equally sacred by Buddhists, Hindus, and Muslims, the ruins of a dagoba, a temple of Vishnu, and a mosque stand together.

192 m **Trincomalee** (see p. 761).

ROUTE 7.

COLOMBO to **TALAIMANNAR** (for **Dhanushkodi** and **South India**) *vid* **Polgahawela, Kurunegala, Maho** Junction (for **Trincomalee, Polonnaruwa,** and **Batticaloa**), **Anuradhapura**, and **Madawachchiya** (for **Jaffna** and **Kankesanturai**)

Colombo Fort to Talaimannar 209½ m by rail Sea passage to Dhanushkodi, about 2 hrs. The Customs examination is held on board the steamer Currency notes can also be changed on board. A breakfast car is attached to the mail train which leaves Dhanushkodi on the arrival of the steamer, and there is also a refreshment car on the mail train which leaves Talaimannar for Colombo at 8 30 a m Travellers to and from India by the mail route can visit Anuradhapura by breaking the journey

The route taken by the Ceylon-India Boat Mail train from Colombo to

46 m **Polgahawela**, R (R H), junction for Kandy (Route 1)

59 m **Kurunegala** (R.H) in the North-Western Province is situated at the back of a chain of rocks, which from their fancied resemblance to animal forms bear such names as **Etagala**, or **Elephant Rock, Ibbagala**, or **Tortoise Rock, Andagala**, or **Bel Rock**, etc Kurunegala town itself is situated at the foot of **Etagala** — an enormous black boulder over 1000 ft in height, resembling the head and shoulders of an elephant From the top of this rock a noble view is obtained At its foot is an artificial lake 12 m. N E. of Kurunegala is the **Ridi** (or silver) **Vihare**, a very ancient Buddhist monastery, most picturesquely situated at a considerable elevation (Good motoring road to the foot of the 200 steps.) It contains a large and rare collection of ancient ola (palm-leaf) volumes of the Buddhist Scriptures. Some of the doors of the temple are carved and inlaid in ivory.

From Kurunegala there are good roads S.W. to Negombo and N.W to Puttalam (see Route 6). The road from Kurunegala to Negombo, passing through **Narammale** (R.H.) Dambadeniya, Giriulla (R.H.) and Welihinda is very pleasing from its varying character and constant succession of woodlands, paddy-fields and coconut groves

At Dambadeniya, 19 m, is a large and famous temple, close to which is a high, apparently inaccessible isolated rock, on which, according to tradition, prisoners were confined The steps cut in the rock are, according to tradition, the work of a prisoner who attempted to escape

12 m from Kurunegala, on the road to Puttalam is **Wariyapola** (R.H) 3 m beyond this the road branches off to **Anuradhapura** 10 m. beyond the junction, after crossing the Deduru Oya by a causeway (not fordable by motor in wet weather, and avoidable by making a short detour *vid* Nikarawatiya, where there is a R H).

86 m from Colombo, **Maho** (R.H.), junction for the line to **Trincomalee** (184 m. from Colombo). At **Galoya**, 55 m from Maho on this line, is a branch line to **Polonnaruwa** (p. 758) and Batticaloa (218 m. from Colombo) For Trincomalee, see p. 761; Batticaloa, p. 738. **Kalawewa** (26 m) and **Kekirawa** (31 m) are stations on the Trincomalee branch (see p 751)

2½ m. from Maho is **Yapahuwa** (=the excellent mountain), picturesque and curious. It was at one time the abode of the

sacred tooth in a *Dalada Maligawa* (tooth-temple); hence the tooth-relic was carried off to India, and recovered by Parakrama Bahu III. in 1288 A.D. The ruins, possibly of a royal palace, standing at the head of a great flight of steps, are quite unique; the decorative sculptures of animals and human figures are particularly fine. Its traceried windows, one of which is in the Museum at Colombo, are especially curious.

99½ m. from Colombo, **Galgamuwa** station. At the last kraal in 1920, 35 elephants out of 39 were noosed near here. 5 m. from Galgamuwa on the Anuradhapura road, and thence 2 m. along a village road, are the ancient ruins of Rajangane.

126¼ m. **Anuradhapura** station, R. (Hotels) (see pp. 752-756).

142½ m. **Madawachchiya** (R.H. 2½ m.). Junction for the line running N. to (102¾ m. from Madawachchiya) Jaffna and Kankesanturai (see Route 8).

From Madawachchiya the boat-train proceeds to

192¼ m. **Mannar** station. Mannar is a dreary spot, commanded by a picturesque old Dutch fort, remarkable for the number of the African *Baobabs*, probably imported by Arabs in the Middle Ages and for a breed of black cattle. The church in the Fort contains some 16th-century Portuguese tombstones.

Due S. of Mannar, and halfway between it and Puttalam, is *Marichchukaddi*, the camp for the first **Pearl Fishery** in 1905, when the enormous number of 50 millions of oysters was fished. The Pearl Banks were leased to a London Company for 20 years, but in 1912 the Company went into liquidation and the Government resumed possession. No fishing has been held since 1925. The "Banks" lie mostly in the Gulf of Mannar at a depth of about 7 fathoms. They have excited the cupidity of the nations of all ages from the Phœnicians onwards. There is a large literature on the subject. A monograph by Mr James Hornell (formerly the marine biologist to the Ceylon Govt.), propounded a theory as to the true causation of the Orient pearl in the body of the oyster.

207½ m. **Talaimannar**, at the N.W. point of the island. 2 m. farther on is **Talaimannar Pier**, whence passengers for Madras and S. India cross to (22 m.) Dhanushkodi by a steamer of the S. Indian Railway (see p. 669, Route 36) in 90 minutes.

ROUTE 8.

KANDY to **Matale**, thence by road *viâ* Dambulla and **Sigiriya** to **ANURADHAPURA**, **Mihintale** and **Jaffna**

The railway on leaving Kandy (p 731) crosses the *Mahaweli-ganga* by a fine bridge and continues to

16 m **Matale** terminus station (R.H. good), a great cattle centre Tea, rubber and cacao plantations, together with coconut and other palm-trees, and paddy-fields, mixed with indigenous scrub and patches of jungle, form a pleasing panorama The ground is well broken and beautifully varied with wood and cultivation On the hill above Saxton Park are remains of Fort Macdowall, called after the General Commanding in the Kandyan War of 1803

About 2 miles out of Matale is the remarkable Buddhist temple of *Alu Vihare* Huge masses of granite rock have, at some remote period, fallen from the moutains overhanging the valley In the fissures of these boulders, at a considerable height above the road, the monastery has been constructed. It is difficult to imagine a site more picturesque or more theatrical

From Matale a motor-omnibus runs to Anuradhapura *viâ* Dambulla

30 m. from Kandy, **Nalanda.** The R.H is situated under fine trees. A steep descent leads to a bridge, a path from which, of about ½ m to the E, conducts to the ruins of a *Hindu temple* beautifully situated Nalanda was at one time the residence, not the capital, of **Parakrama the Great** (p 722), **who built a fortress.**

The road for 5 m after leaving Nalanda is very pleasing, passing through fine open woods, among the trees of which peeps of bare, rocky mountains and a rushing stream are obtained. At **Naula** a road to the E leads to *Elahera*, the headworks of an ancient irrigation system of colossal dimensions

45 m **Dambulla** (Dambool) (R H), a large village immediately under the huge black rock in which is situated the **Cave Temple** that makes this place famous Sir Emerson Tennent says: "From its antiquity, its magnitude, and the richness of its decoration, it is by far the most renowned in Ceylon." There is a fine view from the top of the rock Sigiriya can be seen above the trees The temple has large landed possessions in the neighbourhood The five cave-temples display a mixture of Hinduism and Buddhism: one has a recumbent statue of Buddha, 47 ft long

1 m after leaving Dambulla the *Mirisgoni Oya* is crossed by a very high bridge Immediately after passing it the road divides The road straight on leads N.E. to Trincomalee (see Route 9), 4 m along this road, on the right, just opposite to a Public Works barracks, or "lines," is the turn off to

11 m from Dambulla **Sigiriya** (R H) Irregular bus service A guide of the Archæological Dept is available Notice should be sent by post, in advance, to the R.H. if meals are required. It is best to go overnight to Sigiriya and ascend the Lion rock early, returning to Dambulla.

To Sigiriya fortress the King Kasyapa retired (to avoid his brother **Moggallana's** vengeance)

after the murder by him of his father, Dhatu Sena. Here he built his palace and reigned 18 years from 477, or 511 A.D. This extraordinary natural stronghold is situated in the heart of the great central forest, above which it rises abruptly. Remains of the old stairway can be seen on the road to the summit. Iron railings and ladders ease the ascent, and niches are cut in the rock and protecting walls are provided. Copies of some frescoes, considered superior to those at Ajanta, high up in a cavity may be seen in the Museum at Colombo (see p. 726).

The Palace, just traceable on the N.W., and the rock itself, are supposed to have been surrounded by a fosse; a tank still exists on the S.W. side. The Lion Staircase House, the granite throne, the Audience Hall, and the dagoba (¼ m. from the rock, but close to the road) should also be seen. Cave's *Ruined Cities of Ceylon*, Burrows' *Buried Cities of Ceylon*, Mitton's *The Lost Cities of Ceylon*, chap. xi., and Bell's *Archæological Reports* may be consulted.

The branch turning to the left, N., at the *Mirisgoni Oya* bridge is that for Anuradhapura and Jaffna, and passes over an undulating park-like country, and past many newly-restored irrigation works to

58 m. **Kekirawa** (R.H.). Station on the branch line from Maho Jn. (p. 748) to Trincomalee.

From Kekirawa an expedition should be made, 8 m. W. by good motor-road, to the Great Tank of **Kalawewa** (also reached by rail from Maho Junction on the line to Trincomalee). This magnificent sheet of water, with an area of about 7 sq. m., was originally formed by King Dhatu Sena about 460 A.D., who built a bund 6 m. long, 50 ft. high, and 20 ft. broad on the top. This bund retains the waters of two rivers, and forms a lake which even now, when the spill only reaches a height of 25 ft., has a contour of nearly 40 m. The Yoda Ela canal from one of the sluices carries water to Anuradhapura, a distance of 54 m., and supplies over 100 village tanks in its course. A few miles of the canal at the end nearest Anuradhapura were restored by Sir William Gregory about 50 years ago, but the tank itself and the remainder of the canal remained in ruin, as they had been for many centuries, till 1884, when the Ceylon Government decided to restore them. The work was completed at the end of 1887. The bungalow of the engineer in charge commands a fine view over the lake. The ancient spill, 260 ft. long, 200 ft. wide, and 40 ft. high, is still in perfect preservation, the tank having been destroyed, not by any failure of the spill, but by an enormous breach on one side of it—now covered by the new spill wall, a fine structure over 1000 ft. in length, which reflects much credit on its designer and builder, Mr. W. Wrightson, of the Ceylon Public Works Department. At the foot of the bund are ruins of the very ancient city of **Vijitapura**, sometimes, but doubtfully, identified with Wijito.

2 m. W. of Kalawewa is the **Aukana Viha.a**, an ancient monastery in a wild and secluded situation, where is an enormous rock-cut standing statue of Buddha, 46 ft. high. The statue has a thin support to the rock from which it is carved, and the right arm is raised and free from the body of the statue.

The road from Kekirawa passes for the most part through monotonous and uninteresting forest to

72 m. **Tirapane** (R.H.). 4 m. farther, at Galkulama, there is a division in the road. The branch leading due N. is the direct road

to Jaffna through Mihintale; the other proceeds N.W. to

86 m **ANURADHAPURA** (Hotel good *) (126½ m from Colombo by rail, see p 749). "The buried city of Ceylon," famous throughout the East for its ancient and extremely interesting ruins—the relics of a civilisation that existed more than 2000 years ago, when the city was the capital of a succession of ancient kings The city is said to have measured 256 sq. m., *i e*, 16 m in each direction: rather it comprised two cities, one within the other A motor-car to visit the ruins can be arranged by the manager of the hotel, also the services of licensed guides. For a thorough examination of the ruins all necessary information and assistance will be given at the Kachcheri. Cave's *Ruined Cities of Ceylon*, Burrows' *Buried Cities of Ceylon*, Still's *Guide to the Ancient Capitals of Ceylon*, Mitton's *Lost Cities of Ceylon*, chaps III-ix, and Bell's *Archæological Reports* may be studied The headquarters of the Archæological Commr of the Arch Survey are at Anuradhapura

A certain number of the ruins lie within 1½ m. of the cross roads, the Brazen Palace and the Bo-Tree being close on the E, and the Thuparama (the oldest stupa in Ceylon), and Ruanwelli dagobas on the N. The larger Jetawanarama and Abhayagiriya dagobas lie N. The ruins cannot be thoroughly seen in less than two days if a visit to Mihintale is included.

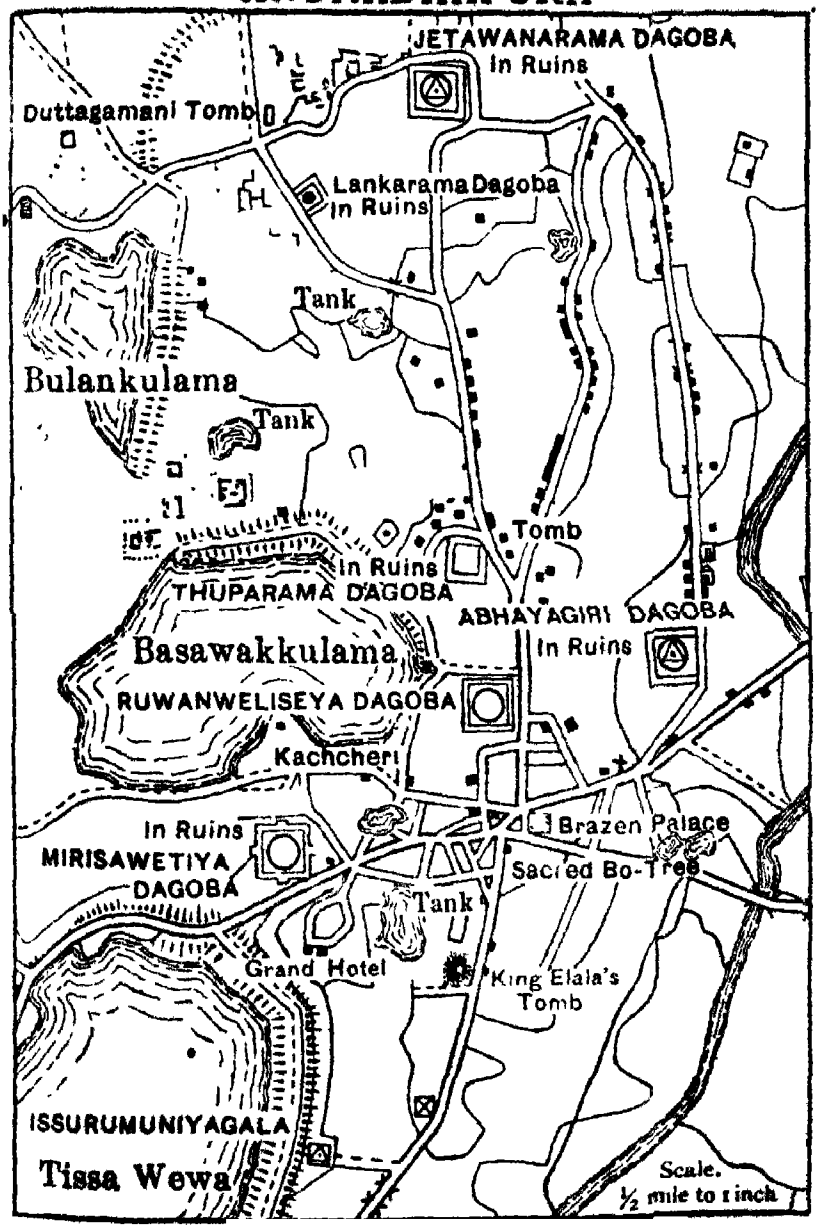
Anuradhapura was founded by King Pandukabhaya, who made it his capital in 437 B.C., and called it after the constellation Anuradha. It attained its highest magnificence about the commencement of the Christian era. It suffered much during the earlier Tamil invasions and was finally deserted as a royal residence in the 9th century A D. A small village has always remained on the site, but it is only since the constitution of the North Central Province, in 1872, by Sir W. Gregory, that any revival has taken place in this much-neglected District Village tanks have been restored; famine and the dreadful disease called *parangi* (produced by the use of bad water and food) have been driven away Sisal hemp and food products are grown

The main objects of interest at Anuradhapura may be divided into *Dagobas Monastic Buildings*, and *Pokunas* or *Tanks*

The **Moonstones** of Ceylon have been described as unique: they are not the "milky-blue" jewels of Ceylon, but are semicircular granite stones, placed at the foot of a flight of entrance steps, and wonderfully carved in concentric rings, containing processions of animals and floral scrolls of artistic design Fine specimens are to be seen at a building near the Thuparama stupa and at Polonnaruwa (p 758)

The eight **Sacred Places** held by the Buddhist Community at Anuradhapura are — The Bo-Tree, Brazen Palace, Abhayagiriya, Jetawanarama, Lankarama, Miriswetiya, Ruanweli, Thuparama dagobas—the archæological authorities not being responsible for their preservation

ANURADHAPURA



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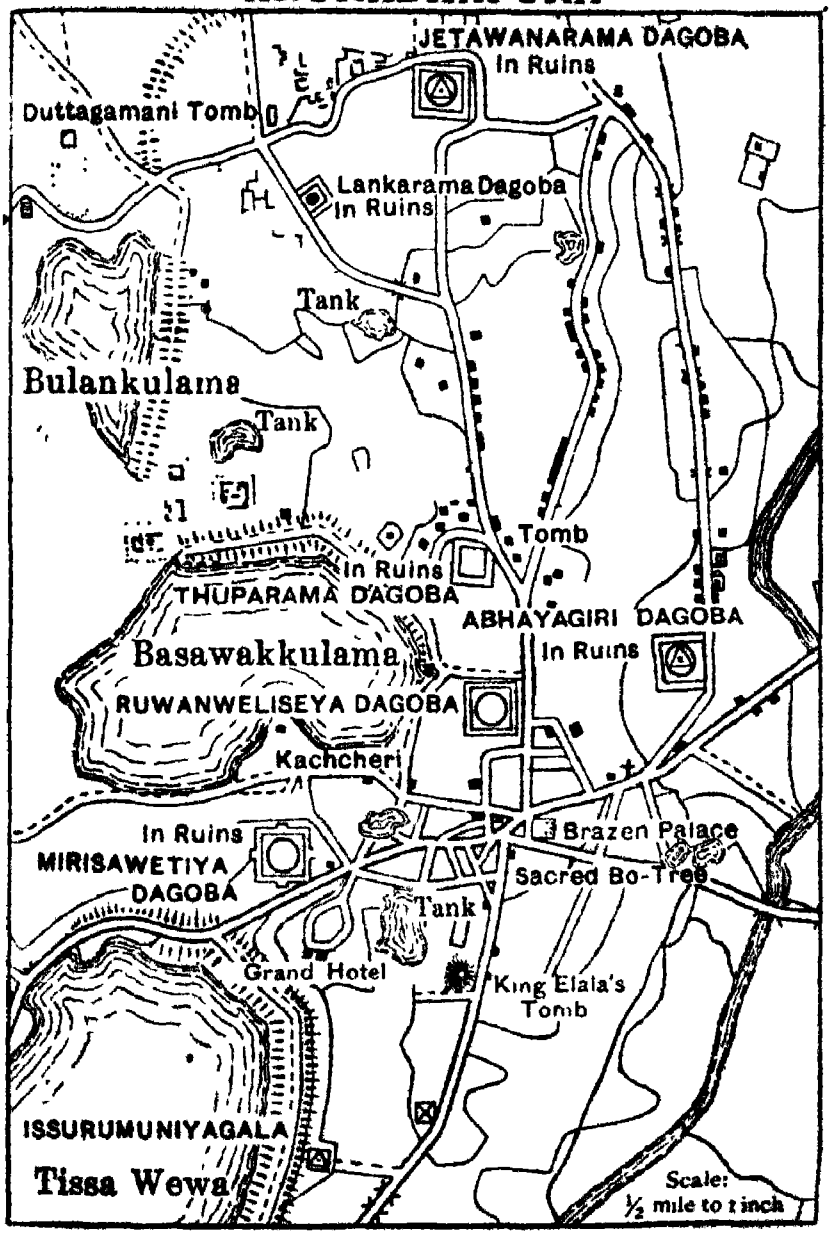
ANURÁDHÁPURÁ



I. Dagobas.—A dagoba is a bell-shaped construction erected over some relic of Buddha or a disciple (see p lxxxiii). It is always solid, and is surmounted by a cubical structure called the *hti*, which again is surrounded by a lofty spire. The number is countless, varying in size from the four great dagobas to tiny objects. There are signs of serpent worship in many sculptures

The four chief dagobas are

1. The *Ruanweli Dagoba* was a real dagoba, *i e*, relic storehouse, commenced by King Dutugemunu, completed about 90 B C. Its diameter is 252 ft, but having been much injured by the Tamils in different invasions, it is now only 180 ft in height The lower part of the structure and the platform on which it stands were cleared about the year 1873, and the various fragments of the so-called four "chapels" facing the cardinal points were put together This dagoba has been restored by the Buddhists In shape it is a solid inverted bowl, with a small passage leading to the relic-chamber

2. The *Abhayagiriya* (Mount of Safety), the largest dagoba, was begun by King Mahasena, 275-292 A D., or 302 A D Its diameter is 327 ft., and its height when perfect was about 270 ft It has now lost a great part of the pinnacle, and its present height is only about 249 ft. It stands on a grand paved platform, eight acres in extent, raised some feet above the surrounding enclosure Sir Emerson Tennent calculated that the bricks are sufficient to construct a town of the size of Ipswich or Coventry, or to build a wall 10 ft high from London to Edinburgh. The *hti* on the summit having shown symptoms of falling, it and the stump of the spire above it have been made safe, but the lower part remains untouched. The summit, easily reached, commands a magnificent view

3. The *Jetawanarama*, built in the 4th century A D, was of about the same dimensions as the Abhayagiriya It has been suggested, with some probability, that the names of these two dagobas have been transposed, possibly from the 12th century The Buddhist Atamasthama Committee allowed a Buddhist monk to make "improvements" on the dagoba, after he had felled all the trees, the Archæological Commissioner took over the ruin in 1910, to save it Supposing that Jetawanarama is the ancient Abhayagiriya, its foundation is dated 88 B.C., and its enlargement 113–125 A D

4 The *Mirisweliya* was built by King Dutugemunu in the 2nd century B C, and rebuilt by Kasyapa V (929-39 A D) It is surrounded by monastery ruins on three sides Though smaller than the Jetawanarama, it is remarkable for the unusually fine sculpture of its "chapels," or shrines, of the Dhyani Buddhas It has been partly restored at the expense of the late King of Siam

Among the minor dagobas, the Thuparama (the oldest in Ceylon) and Lankarama, or Pokarama surrounded by three or four circles of carved columns, are among the most remarkable and most elegant These columns are a special feature of Ceylon dagobas. A monastic building near the Thuparama, recently disclosed and restored, has unique features

The ruined *Dalada Maligawa*, or Temple of the Tooth, is identified by an inscription. The tooth-relic is described (p. 732) at the Dalada Maligawa at Kandy N. of this temple, in the Citadel, a brick building was unearthed in 1932-33 Near the Mahapali or Alms-hall a stone well, with galleries and flights of steps, was found at the same time

II The remains of **Monastic Buildings** are to be found in every direction in the shape of raised stone platforms, foundations, and stone pillars. The walls themselves between the pillars, being of brick, have disappeared.

One of the most remarkable consists of 1600 stone pillars about 12 ft. high and only a few feet distant from each other, arranged in forty parallel rows These formed the lowest storey of the famous nine-storeyed "**Brazen Palace,**" or monastery, erected by King Dutugemunu 161 B.C., or 101 B.C., nine storeys high (reduced to seven) as described in the Mahavamsa It may have been the nucleus of the Mahavihara, or Chief Monastery of the town, the upper storeys were of wood

Buildings of this type in every direction for 10 m. are innumerable. Among the most remarkable is one called the Queen's Pavilion, the semicircular doorstep of which is carved with a double procession of animals and studies of flowers Another, examined 1932-35, is close to the Thuparama stupa.

III. The **Pokunas** are bathing-tanks, or tanks for the supply of drinking water, being wholly constructed of masonry or of cement. These are to be found everywhere through the jungle. The finest is the double (Kuttam) tank in the outer circular road, and to the W. of the Jetawanarama Dagoba, into which elaborately-carved staircases descend

One object of interest does not come under these heads, the sacred **Pipal or Bo-Tree** (*Ficus religiosa*)—originally brought from Buddh Gaya (p 57)—and though only a fragment now, remains probably the oldest historical tree existing It was originally brought by the sister of Mahinda the Princess Sanghamitta, as a branch of the bo-tree under which Buddha sat at Buddh Gaya, and planted about 240 B.C. (also dated 288 B.C.) From that time to this it has been watched over by an uninterrupted succession of guardians. It stands on a small terraced mound, and is surrounded by a number of descendants The adjacent buildings are all modern, but the entrance to the enclosure possesses a fine semicircular doorstep or "moonstone"

Some fine bronze statues found at Anuradhapura in 1908 are now in the Colombo Museum

Another object of interest is the **Rock Temple** at **Isurumuniya** (S. of the hotel), carved in the solid rock, with a large seated Buddha inside and sculptures in low relief on the terraces

The large tanks of Nuwarawewa (S.E.), Tissawewa, and Basawakulam (W.), both filled from Kalawewa, have restored to the neighbourhood of Anuradhapura some of its former fertility

Other objects of interest at Anuradhapura and in the neighbourhood are—the stone **canoes**, the Peacock Palace, a vihara W of Ruanweli, the Selachaitiya dagoba, rock-dwellings (galge, etc.), the so-called Elephant Stables (with the guardstone), the King's Palace, the Pankuliya monastery, Vijayarama, Yantragalas (square stones

with holes), Elala's tomb, Vessagiriya monastery (a town in itself), groups of buildings on the Arippu Road, the Kiribat dagoba, the Mullegalla and Puliyankulam monasteries. A colossal Buddha has recently been brought here from Puravasankulam in the district. It resembles a Buddha statue on the Outer Circular Road

8 m. E. of Anuradhapura is **Mihintale** (R.H.) a centre of Buddhist pilgrimage (A motor-coach from Anuradhapura to Trincomalee passes Mihintale, or a conveyance can be obtained at the Hotel.) It is a rocky hill crowned with a large dagoba, and literally covered with the remains of temples and hermitages Ancient and picturesque stairs of many hundred steps lead to the summit, whence there is a very fine view over the forest plain, from which the great dagobas of Anuradhapura stand up like the pyramids or natural hills.

A mound on a spur of the hill, excavated 1932-35, has proved to be a stupa, the Kantaka Cetua, 425 ft. in circumference at its base, and probably once 100 ft high It has "frontispieces" (at the four cardinal points), the sculptures on which deserve careful study. It is mentioned in the Mahavamsa and very old

The centre of attraction at Mihintale is *Mahinda's Bed*, the undoubted cell occupied by Mahinda (son of the great King Asoka) the apostle of Buddhism in Ceylon, in the reign of King Dewanampia Tissa, and containing the stone couch on which he lay. The view from the interior is enhanced by the position from which it is obtained between the rocks which overhang the "bed." Beside the cell is the Ambasthala dagoba, erected on the traditional spot where King Dewanampia Tissa met the missionary Mahinda.

Mihintale has various other objects to be visited, such as the Alms Hall, the Half-way House, the open-air Lion Bath, the stone boat, Giribandha dagoba, Naga pokuna, Kaludiya Palace, the Elephant Calf Hill, and on the summit the Mahaseya dagoba, containing a hair of Gautama Buddha.

From Anuradhapura, Colombo can be reached in 6 hours by the boat-train from Talaimannar

Travellers for the North can either go direct by rail to Jaffna (p 749, Route 7) and Kankesanturai or by road The stages are as follows :—

95 m. from Kandy (by direct road through Mihintale) **Madawachchiya** (R.H.) (see p. 749)

From here a road leads N.W. to (52 m.) Mannar (R.H.) (p. 749), passing the *Giant's Tank* and the magnificent masonry dam which diverts the *Aruvi Aru* to fill it, and a railway, 65 m. long, runs to Talaimannar (see p. 749).

111 m. from Kandy **Vavuniya** (R.H.), a small town on the edge of a restored tank

126 m. **Puliyankulam** (P.W.D. bungalow)

139 m. **Mankulam** (R.H., good) From here there is a good metalled road, 30 m., to **Mullaittivu**, on N.E. coast (motor-bus service), the headquarters of the District, under an Asst. Govt Agent.

154 m. **Iranaimadu.** Here are large irrigation works.

The scrub gets lower and smaller, and the soil poorer and sandier, as the tedious straight road is followed to

166 m. **Elephant Pass** (R.H.), so named because here the herds of elephants were in the habit of

coming from the mainland through the shallow water to the peninsula of Jaffna, which is now entered by a long causeway crossing the arm of the sea which all but divides the district of Jaffna from the remainder of Ceylon

The R.H. is the old Dutch fort at the edge of the water—quaint, picturesque and usually cool Fishing in the lagoon, Nov to Jany.

174 m **Pallai**. The region now attained is totally different from that between Anuradhapura and Elephant Pass The peninsula of Jaffna is the home of a busy, industrious, and closely-packed population Every cultivable acre is cultivated, and the garden-culture is of beautiful neatness Great quantities of tobacco of a very coarse description are grown, a portion of which is exported to S India. The fine road passes through a succession of large villages as it proceeds

187 m. **Chavakachcheri** (R.H good), a large village surrounded by groves of the palmyra palm, which takes the place occupied by the coconut palm in the South.

201 m. **Jaffna** or Jaffnapatam (R H) is the see of a Roman Catholic bishop.

The old *Dutch Fort*, of considerable size, is in perfect preservation, and is a good specimen of fortification (1680). Within it are the *King's House* (The Governor's residence when he visits Jaffna), an old *Dutch Church* containing curious tombstones (one dated 1621), the residences of certain officials, and the prison. On the esplanade between the fort and the city stands a graceful *Clock Tower*, built in 1882. The Dutch expelled the Portuguese from Jaffna, their last station in Ceylon, in 1658.

The following excursions may be made :—

1. To the Mission Stations at Uduvil, Vaddai Koddai, and Kopay, where thousands of children are educated American Mission Hospitals at Inuvil and Mannippay

2 To Puttur, where is a very remarkable well of great depth, which is apparently inexhaustible, and ebbs and flows slightly daily.

3 To Point Pedro, the Northernmost port of Jaffna, motor-bus service, 21 m., via Valvettiturai

4 **Kankesanturai** (R.H) (11½ m from Jaffna) The terminus of the Northern Railway. Sea-bathing

5 By coast road and ferry to the island of **Kayts**, where the Dutch fort is a miniature Château d'If. Motor-bus service, 14 m from Jaffna *viâ* **Karaitivu** reached by a 2-m causeway with 10 bridges

Jaffna is celebrated for its mangoes, esteemed by some as superior to the far-famed Bombay variety Grapes are also grown *Turtles* are caught, and *bêche-de-mer* or *trepang*, a species of sea slug, is fished for, and exported to China, where it is considered a great delicacy. *Chanks* (the shells of a mollusc) are also fished for and exported to N. India, where they are highly esteemed for jewellery In the little Island of Delft, S W. of the Jaffna Peninsula, ponies used to be bred

ROUTE 9.

KANDY to TRINCOMALEE (with excursion to Polonnaruwa)

Motor-omnibus service from Kandy to Trincomalee; from Matale, *viâ* Dambulla, to Habarane; and from Trincomalee to Anuradhapura. Rail from Habarane to Polonnaruwa *viâ* Galoya Jn.

Trincomalee can be most conveniently reached by rail from Colombo (184 m.) *viâ* Polgahawela and Maho junction. For those who have motor-cars and prefer the road journey, Matale (p. 750, 113 m. from Trincomalee) is recommended as a starting-point. From Matale to **Dambulla** the route is the same as Route 8.

On crossing the bridge over the *Mirisgoni Oya*, instead of turning left to Anuradhapura and Jaffna (Route 8), the road proceeds straight on and, passing at 50 m. the road to Sigiriya (p. 750), continues chiefly through dense but poor forest, varied by one or two villages in the midst of small clearings, to (60 m. from Kandy) **Habarane** (R.H.).

Habarane (130 m. from Colombo) is a station on the railway from Maho Junction to Trincomalee. There is a picturesque *Buddhist Temple* of considerable antiquity to be seen here, the paintings are of better design and execution than are usually found in such places. From the lofty rock by the tank a remarkable view is obtained over the great sea of forest to the N. and E., out of which rises with startling abruptness the rock pillar of Sigiriya (see Route 8).

From **Habarane** an extremely interesting excursion may be made to **Polonnaruwa** (27 m., R.H.), one of the ancient and deserted capitals of Ceylon. In the **Mahavamsa** Polonnaruwa is called Pulatthi or Pulastipura; its real name is Toparé, from the adjacent Topawewa (below). Rail to Galoya Jn. (p. 760). There is no motor-bus service, but motoring roads lead to all the ruins.

After passing 12 m. through dense forest up to a few yards on either side of the path, **Minneriya** is reached. This magnificent tank, built by King Maha Sena in 275 A.D., was restored in 1903. The reservoir is upwards of 20 m. in circumference, and no point in its margin commands a view of its entire expanse. The scenery of this lake is enchanting, and nothing can exceed the beauty both in form and colour of the mountain ranges to the S. At 20 m. is the small lake of **Giritale**.

The **Polonnaruwa** R.H. is on a promontory into the great lake or tank of Topawewa (charge Rs 8.25 a day, rooms should be engaged beforehand). The view is very similar to that from Minneriya, and is of great beauty.

Polonnaruwa first became a royal residence in 368 A.D., when the lake of *Topawewa* was formed, but it did not take rank as the capital till the middle of the 8th century. The principal ruins, however, are of a later date, being chiefly of the time of Parakrama Bahu, 1164–1197 A.D., or 1153–1186 A.D., the epic hero and chief name at Polonnaruwa: the Mahavamsa is full of his prowess. It is now wholly deserted, and the masses of ruin, which extends 1½ m. N. to S., have to be sought in the dense jungle. It seems to have been abandoned about 1288 A.D. The ancient sites are all in the care of the Government. A detailed account (with plan) will be found in Mitton's *Lost*

Cities of Ceylon (Chaps. XII-XVIII, Murray, 1928), upon which the following brief summary is largely based.[1]

Close to the R H. and to the E. of it are the **Audience Hall** and the **Council Chamber**; near the latter was discovered in 1820 the colossal stone lion, 6 ft. from the sole of the foot to the crown, which is now in the Colombo Museum (p 726), it served as a support for the throne To the E again is the **Citadel**, some 25 acres in extent, containing a massive building which has been identified with the Royal Palace Hard by is the beautiful **Elephant Pavilion** which rises on three platforms, elephants are carved in the panels on the lowest stage, and lions and dwarfs on the other two. Just outside the Citadel, a stone bathing pool (Kumara Pokuna) has been restored (1933-35) It was constructed by Para-krama-bahu I (p 722)

About 1 m. S of the R H. is the colossal rock-cut figure, 11 ft 6 ins in height, commonly called the statue of **Parakrama Bahu I** In the Ceylon Arch Survey Report for 1909 it is pronounced to be "unmistakably, a rock-hewn portrait of a revered religious teacher from the Indian Continent" A cast of it is to be seen in the Colombo Museum. Straight in front of the statue, and about 200 yards away, is the **Potgul Vihara**, or Library dagoba, a circular building with remarkably thick walls (nearly 15 ft at the ground). There is a tradition that it once contained the sacred books, hence the name To the W of the R.H. lie the ruins of what appears to have been a strong tower, the probably wooden interior of which is wholly gone; and a little farther in the same direction are the royal pavilions and bathing-tank, ornamented by much elegant sculpture

About 1 m. to the N is a remarkable group of buildings—the popularly named **Dalada Maligawa**, or tooth-shrine, officially called **Siva Devali**, No 1 (It is really a Hindu temple of about 1200 A D, a fine granite building having much elegant ornament of quasi-Hindu design, where *the* tooth may have received temporary shelter), the **Thuparama**, a large, massive brick temple, of the 12th century, Hindu in design—containing images of Buddha—the front and Eastern roof have fallen, while the inner chamber preserves its vault and a tower, the **Wata Dagé** (=circular relic-house), a curious circular edifice, 58 ft in diameter on a raised mound, with four carved staircases and a low stone terrace with an ornamental parapet, once 14 ft high, of unique design, and to the N of this the **Ata** (or **Hata**) **Dagé** (=house of eight relics), a large ruined temple Lying to the E of the Ata Dagé is the massive **Gal-pota**, or Stone Book, a slab weighing nearly 25 tons, in the shape of a palm-leaf book In the same vicinity are the **Satmahal Prasada**, a tower of seven storeys of diminishing size; the **Nissanka-latamanda-paya**, called the Floral Altar, and sometimes, perhaps wrongly, regarded as a **Buddhist "post and rail" enclosure** (see p lxxxvu), and a little farther to the N the **Vishnu Dewale**, a very ornamental structure of Hindu design, in good preservation Due N from the Satmal Prasada are also the **Pabulu Vihara**, the third largest at Polonnaruwa and the **Siva Devali No 2**

1 m farther N is the **Rankot Dagoba**, called also the **Ruanwellesaya**, the Place of Golden Dust, built in the 12th century. It is 200 ft. in height, with a diameter of 180 ft The spire is very perfect, even the statues surrounding

[1] See also Fergusson's *Indian and Eastern Architecture*, 1, 244-249.

the drum being clearly discernible. Near it, but to the N., is the **Jetawanarama**, a mass of ruins, of which the principal ruin is called **Buddha-sima-prasada**, the "House of the Elder," a temple 170 ft. long, 70 ft. wide, and 70 ft. high, at the end of which is a statue of Buddha once nearly 45 ft. high, now headless. The **Kiri** (=milk-white) **dagoba** about 100 ft. high, the chunam coating of which is still very perfect, adjoins this building.

Another 1 m of jungle has to be traversed S. to reach the **Gal** (= Kalugal, or the Black-rock) **Vihara**, a spot where are a rock-cut figure of Buddha sitting, a colossal statue, 23 ft high, of Ananda, Buddha's favourite disciple, in a pose of deep sorrow, and a reclining figure of the unconscious Buddha, 46 ft long, cut out of the solid rock

1 m farther N. again is the **Demala Maha Seya**, containing an upright Buddha, once over 40 ft high; a very large building, highly ornamented, of which the roof and upper part of the walls have fallen in. The *debris* was partially cleared away in 1886, when many interesting frescoes were found on the walls, but these have since to a great extent perished from exposure.

2 m. to the N beyond this (4 m from the R.H.) is the famous **Lotus Bath**, which is thus described in the Ceylon Arch Survey Report for 1909 —"Imagine a gigantic lotus flower of granite, full blown, 24 ft. 9 in in diameter, with five concentric lamina of eight petals, gradually diminishing to a stamen. Then decide to reverse nature's order, and instead of a convex shape, depress the petal rings into a concavity . . . and we have the granite bath as it exists in all its shapeliness to this day." Not very far to the S. is the **Unagala Vihara**, now a shapeless mass, but once the largest of the dagobas

The dagobas of Polonnaruwa will not compare with those of Anuradhapura, but the buildings are in far better preservation. A huge red lotus grows in great profusion in the lake, probably the descendant of those cultivated for use in the temples and palaces of the city

Varied sport can be obtained from Polonnaruwa under the Government Regulations: there is a close season for certain animals

140 m. from Colombo is **Galoya** junction, for a branch line (77 m.) to Batticaloa (p. 738) 7 m from Galoya on this line is **Minneriya** (p. 758) and 14 m farther on is **Polonnaruwa** (p. 758).

On the road to Trincomalee is (70 m from Kandy)

Alutoya (P.W.D Bungalow, permit from Dist. Engr., Maradan Kadawela) in the midst of the thick forest Monkeys are certain to be seen crossing the road in large troops during this portion of the journey

159 m **Kantalai** stn (R.H.), on the bund of the great tank of Kantalai, restored by Sir W. Gregory in 1875

170 m. **Tampalakamam** (Tamblegam) Irrigation Circuit Bungalow, permit from Divl Engr., Batticaloa.

In *Tampalakamam Bay*, the *window-pane* oyster (*Placuna placenta*) is found—so called from the use to which the Chinese sometimes put the flat translucent shells. The Placuna pearls, valueless as gems, are used by the

wealthy classes in India to make lime to chew with "betel."

184 m. by rail from Colombo, **Trincomalee** (R.H.) 65 m. from Anuradhapura, to which there are daily bus services (fare R.1 per seat). A motor-bus service also daily between Trincomalee and Colombo, Kandy, Matale, Jaffna and Batticaloa. It is a town with a magnificent natural harbour, very important in the days of sail. It is built on the N. side of the bay, on the neck of a bold peninsula, separating the outer from the inner harbour, about 4 sq. m. in extent, with very deep water. The Navy Yard is on the W. Little Sober Island (recreation ground) is the property of all wardroom officers of the Royal Navy.

The Tamils built a great temple where Fort Frederick now stands. The building was destroyed by the Portuguese when they took the place in 1622, and the materials were employed to build the fort, but the site is still held in great veneration, and every week a Brahman priest, in the presence of a large crowd, throws offerings into the sea from a ledge near the summit of a huge precipice of black rock—a most picturesque scene.

A monument on the summit bears an inscription in Dutch, which purports to commemorate the death of a young Dutch lady, who, according to tradition, in 1687, being disappointed in a love affair, committed suicide at the spot. But the prosaic fact is that the lady long survived the erection of the monument (*Repts. on Dutch Records*, by R. G. Anthonisz, Govt. Archivist, p. 39).

After the Portuguese, European nations have held the place in the following order: Dutch, 1639; French, 1673; Dutch, 1674; English, 1782 (Jan.); French (Suffren), 1782 (Aug.); restored by French to Dutch, 1783; English, 1795. It was formally ceded to Great Britain at the Peace of Amiens in 1802.

The entrance is marked by a Lighthouse at Foul Point, and another light is placed farther in on Round Island. The Mahaweliganga, the largest river in the Island, disembogues here.

About 6 m. N.W., at Kanniya, there are seven *hot* springs. Ravana is said to have struck his spear in a rage.

Good shooting (principally snipe) is to be had in season in the neighbourhood of Trincomalee.

In *Koddiyar Bay*, S. of Trincomalee the ship *Ann* was wrecked in 1660, and Captain Knox, his son Robert and his crew were captured. A white stone at the foot of an old tree is inscribed — "This the White Man's Tree under which Robert Knox, Captain of the ship *Ann*, was captured A.D. 1660. This stone was placed in 1893." (See p. 738.) On the hill between the bays is the reputed grave of Ravana, the demon of the Ramayana Epic.

ROUTE 10.

Sporting Tours.

The attention of sportsmen is called to the work of the Game Preservation Society (headquarters Nuwara Eliya) whose main object is to enforce "the close seasons" The open season for game (including peafowl) is from 1st November to 31st May Visitors who profit by the work of the Society are invited to contribute to its funds. See *Sporting Districts* in the *Times of Ceylon Green Book* There are some useful hints in *Tales from an Eastern Jungle*, by R W S Mitchell (Cecil Palmer 1928)

Such tours as the following, of course, require some degree of preparation Though there are R.Hs on the routes indicated they are but few. They contain probably no furniture save a table and a bench or two, and are quite destitute of supplies The traveller or sportsman will have to carry his own food, cooking utensils, bedding, and tent, and this will necessitate the employment of numerous porters, whose pace must regulate his own, though, if on horseback, he can get over the ground more rapidly than they do. If expense is not an object, it would be well to get temporary shelters of bamboo and leaf thatch put up at those places where there is no R H , for the tent is but an indifferent protection against either fierce sun or heavy rain, and health may suffer seriously in consequence

In the *Southern Province* all R.Hs. are well furnished and provided with beds and bed linen, crockery, cooking utensils, etc. Supplies, except fowl, eggs, rice, etc , are not usually found except in the principal R.Hs Soda-water is usually available Public Works Department Bungalows (permits from Dist. Engrs) usually contain only a table and two chairs. The stages are generally long, and for the sportsman particularly it is advisable to bring a tent, food, cooking utensils, etc Bullock-carts can be hired at reasonable rates where there are roads

1 The South Eastern Area[1] It is not supposed to be likely that any sportsman would make the *whole* of this tour, but it indicates a line of country any part of which would make a good centre for sport The animals to be found are elephants,[1] bears, leopards, deer, and in some places wild buffaloes, wild peacocks abound in the forests, and the tanks and marshes are full of wild fowl; they also swarm with crocodiles

Starting from **Badulla** (R H.), by car the road to Bibile (R H) is described in Route 2

Here wheel conveyance must be abandoned, and the distance must be counted not by miles but in hours, the hour being calculated on the ordinary pace of a loaded porter

6 hrs **Nilgala**. A small village with a little patch of paddy cultivation, situated most picturesquely on a river at the entrance to a wild and narrow pass.

4 hrs **Dambagalla** (Circuit bungalow, permit from Govt. Agent, Badulla). A small village N. of the road to Puttovil.

Medagama, in a very pretty jungle country abounding with elephants, can be reached by a road liable to floods at causeways 10 m S from Bibile.

[1] A licence to shoot an elephant costs for residents Rs.100 and for non-residents Rs.300, a buffalo Rs.20 for residents and Rs 75 for non-residents, and a general game licence Rs.5 and Rs 45 for non-residents per annum.

The road runs on to

20 m. **Nakkala** There is a picturesque Buddhist temple on the side of a mountain in the neighbourhood.

25 m. **Hulandawa**, junction with the *Ratnapura* road. *Turning to* the right, after 10 m at

Buttala (R H. good). An oasis of cultivation in the jungle, due to the restoration of its ancient irrigation works of which everywhere through the forests ruins are to be found Excellent snipe-shooting during October to January

4 hrs. S. from Buttala **Galge** A mass of bare rocks rising from the jungle

3 hrs. **Kataragama**. A famous place of Hindu pilgrimage, to which worshippers resort annually from all parts of India The pilgrimage was found to produce such mischievous effects in the spread of disease that the Ceylon Government has for many years endeavoured to check it, and it is now reduced to comparatively small numbers. The temple itself is but an insignificant building, and a single gilt-metal tile forms the only relic of the golden roof for which it was once celebrated

6 hrs. **Palutupana** (see p 746), on the coast A track to Panama (below) is suitable for carts only

1 hrs **Yala River** (primitive halting bungalow). Here begins the District in which wild buffaloes are still found. On both banks of the Yala River large tracts of country have been "proclaimed" by Government, and is known as the "Yala Sanctuary," in which *no shooting or hunting of any sort* is allowed. The Sanctuary lies between the rivers Yala and Kumbukkan, the other limits being the sea on one side and the boundary of the Southern Province. Good forest scenery on river In this part of the island many inscriptions and sculptures were found in 1934

3 hrs **Uda Potana.** No R.H. About 2 hrs from Uda Potana the ford crossing the Kumbukkan Aar the boundary between the Southern and Eastern Provinces is reached, and about ½ hr farther is **Kumuna** (P.W D Bungalow), near a small village

6 hrs **Okanda** at the foot of a bare rock rising out of the sea of jungle Peacocks are to be found in great abundance in the neighbourhood

3 hrs **Panawa** or Panama (Irrigation Bungalow, permit from Divl Inspector, Batticaloa) Fair weather road to Pouttovil.

6 hrs **Lahugalawewa** (Mahawewa) A restored tank, the haunt of many wild-fowl There is an Irrigation Bungalow at the tank, permit from Divl Inspector, Batticaloa Many elephants in the neighbourhood

From this point an excursion of some days may be made through the wild country on the border of Uva and the Eastern Province. There are hardly any villages and the only accommodation, not specially provided for, would have to be found in the meagre hospitality of some secluded Buddhist monastery, of which a few are scattered through the forests. Any further route would certainly depend upon the reports received as to the haunts of wild animals at the time

It may, however, be assumed that a return to comparative civilisation will be made at Irrakamam, a restored tank, where there is an Irrigation Bungalow, permit from Divl. Irrigation Engineer, Batticaloa. In its vicinity are the scanty ruins of what was once an enormous

dagoba, and a fair road leads hence to **Kalmunai** (R.H.) on the coast, and thence to (25 m.) **Batticaloa** (see Route 2). The sportsman, however, will probably prefer to proceed through the jungles to **Chadaiyantalawa** and **Amparai** tanks, both of which are swarming with crocodiles; and from the latter to

6 hrs the river **Namal Aru** (Namal Oya), the boundary of the Eastern Province, on crossing which the traveller finds himself again in Uva

5 hrs riding along a good track will bring him back to **Nilgala**, from whence he may either return to Badulla the way he came or 10 m. to **Madagama** (R H) and 4 hrs. Alupota, rejoining the main road to Badulla at (2 hrs) **Passara** (R H) (See Route 2)

The foregoing tour, under the title of "The Park Country and the Batticaloa Tanks," is more fully described in Sir Samuel Baker's *Rifle and Hound in Ceylon*, 1854.

2 **The Horton Plains** (see Route 2) Here deer are hunted on foot and knifed; there is also excellent trout fishing in season. Full particulars may be obtained at *The Hill Club*, Nuwara Eliya, or from the Assistant Government Agent at that place

3 **The Trincomalee District** (see Route 9)

4 **The Puttalam District** (see Route 6)

The Wil Pattu Sanctuary This Sanctuary of 150 sq m was formed in 1903 on the lines of that of Yala

5 **The Hambantota District** (see pp 741, 745)

6 **Minneriya and Polonnaruwa** (Route 9)

DIRECTORY

This gives a single reference to the page or pages on which the place is described. Then follows the information available as to where food and accommodation can be had. Next, for the cities and large towns, follows a variety of information, and for the small places a hint of what is worth seeing in the neighbourhood. This may assist the planning of tours or excursions. It is not thought necessary to state where petrol is available, because this information can be supplied by Motoring Associations These and Railway Publicity officers should be consulted, because dak bungalows may be converted to other uses.

Discrimination has been used in exclusion of a number of places, about which information is given in the text, on the routes of motor tours in Kashmir and Ceylon, of marches in the Himalayas and Sikkim, and steamer trips on the Upper Chindwin River in Burma

Mr MURRAY will feel greatly obliged to travellers who may be kind enough to send him corrections (on a postcard if desired) giving him a permanent address

* Centres for excursions

(R.)=Refreshment Room, (R.R.)=Railway Retiring Rooms D B =Dak Bungalow; K = with messman, numbers of suites (when known) follow in brackets, C H =Circuit House, R H =Rest House or Bungalow to occupy which permission is necessary from an authority mentioned in the text, H=Hotel

A

ABBOTTABAD, 372 (by motor, 9 m from Havelian) D B, 3 R H
HOTELS. *Springfield*, *Abbot*; *Woodlock*.
MUSEUM.
BANK *Imperial*.

ABU ROAD, 207 (R.), D B (for Mount Abu, H).
Conveyances to Mt. Abu (17 m.) Mail motor lorry (two dispatches daily in each direction). An unreserved 1st cl. passenger car (1¼ hrs) runs twice daily, if three seats are booked. Reserved car (between 6 A.M. and 7 P.M.). Heavy baggage should be sent in bullock carts.

ACHALGARH (Mt. Abu), 208; temples.

ACHIBAL (Kashmir), 389, D.B.; garden of Jahangir

ACHNERA, 250 (R.).

ADAM'S PEAK, 733, scenery

ADAMWAHAN, 396, Sutlej Bridge

ADEN (Colony), xliv
National Bank of India

ADONI, 530, D B, fort
BANK *Imperial*

ADRA, 142 (R.), D.B

***AGRA**, 259-274 (R), D B K, R.R
MUSEUMS
HOTELS *Cecil* (Mrs Hotz), *Laurie's*, *Metropole*, *Empress*, *Imperial*, Two Indian Bdg House (Gilmour House (Mrs Hand)
BANKS. *Imperial*, *Allahabad*
BOOKSELLERS. Gaya Prasad & Sons
CHURCHES *St George's*, *St Patrick's*, *Havelock Chapel*, Cantonment, *St Paul's*, Civil Lines, *St Mathias's*, Agra Fort, *R.C Cathedral of the Virgin Mary* in Civil Lines; *Methodist Episcopal*.
CLUB *Agra*, near Post Office
UNIVERSITY
MISSIONS. *C.M.S.*, St John's College, Baptist Mission, Methodist Mission
HOSPITALS *Thomason*, for men, includes Eye Hospital, *Dufferin*, includes Maternity and Lady Lyall Hospitals, *Hewett*, for infectious diseases.

***AHMEDABAD**, 197-204 (R.) (R.R.), R H (Shahibag)
CLUB *Gujarat*
GOLF COURSE.
HOTELS *Grand*, near Christ Church, about 1½ m. from rly. sta., *Bombay*, on Sahib Bagh Road.
BANKS *Imperial*, in the Bhadar, *Central of India*.
CHURCHES. *Christ C.*, close to the Grand H.; also *Church* in the Cantonment, 2 m. outside the city.
MISSION; *Irish Presbyterian Mission*, *R C.*

AHMADNAGAR, 526 (R.), D.B.K. (4), R.B., fort. Good tongas available.
CLUB, good. GOLF CLUB
BANK *Imperial*
MISSIONS *S.P.G., R.C. Mission*

AIHOLI, 573, temples

AJAIGARH, 176, R.M., fort

AJANTA, 67-72, by car from Jalgaon (38½ m.), or Aurangabad (60 m.), D.B.K. at Fardapur, 3 m. by bullock cart from the Caves

AJMER, 216-219 (R., R.R.), D.B.K., Mosque, Rajputana Museum
HOTEL *Empire*
CLUB *Kaisarbagh*
BANK *Imperial*
CHURCH *St Mary's*
MISSION *Medical* of Church of Scotland

AJODHYA, 422 (near Fyzabad) Temples

AKOLA, 134, D.B.K.
BANK *Imperial*.

AKOT, 134, R.M.K.

AKYAB, 714, D.B., airport
CLUBS *Gymkhana Club*, Race Course Road, *Volunteers' Club*, and *Ahyab Club*, both in Main Road
BANK *Imperial*

ALIGARH, 427 (R., R.R.), D.B.K., R.R., fort
BANK *Imperial*
MISSIONS *American Methodist Episcopal, R.C., and C.M.S. Church*
UNIVERSITY *Muslim*

ALI MASJID, 381, fort in Khyber Pass.

ALIPUR (Duars), 487, D.B.

ALIWAL, 334, battlefield

***ALLAHABAD**, 47-53, (R.), D.B.K., fort
MUSEUM *Municipal* (terra-cottas)
HOTELS *Grand, Alliance*, Barnett's, all in Canning Road.
CLUBS: *Allahabad*, Stanley Road; *Thornhill*, Stanley Road; *United*, Thornhill Road (Anglo-Indian Assoc.); *Flying and Gliding* (Bamrauli).
BANKS: *Imperial*, Mayo Road; *Allahabad*, Cawnpore Road.
BOOKSELLER, Ram Narain Lal, 2 Katra Road.
CHURCHES: Anglican: *All Saints' Cathedral*, Canningtown, *Holy Trinity*, Church Rd; *St David's*, Cantonment. R.C. *S. Joseph's Cathedral*, Thornhill Rd. Church of Scotland *St Andrew's*, Elgin Rd. Baptist Elgin Rd
HOSPITALS. *Civil*, Stanley Rd, *Colvin*, City, *Eye*, City.
MISSIONS *C.M.S.*, St Paul's Church, Divinity College, The Baptist, Presbyterian, American Methodist Episcopal, and Zenana
NEWSPAPERS (English) *Leader, Patrika*
UNIVERSITY.
AMUSEMENTS *Picture Palace*, Canning Road, *The Coral*, South Road, *The Rink*, Cawnpore Road

ALLANMYO, 706

ALLEPPEY, 637, 2 D.B.K., R.M., port
BANK *Imperial*

ALMORA, 420, 2 D.B.K. Boarding-houses

ALONE (Chindwin), 717

ALWAR, 224, D.B.K. close to rly sta. Application should be made beforehand to the Munsarim Buggi Khana for the use of a carriage (there is a fixed charge), also to the Prime Minister for permission to visit the Palace, Library, Treasury, and Armoury
MISSION Church of Scotland

ALWAYE, 635, R.M., bathing

AMALNER, 42

AMARAPURA, 699, R.M., pagodas

AMARAVATI, 510, old capital

AMARKANTAK, plateau, 140

AMARNATH, 389; cave

AMBALA, 323 (R.), D.B.
HOTELS *Parry's*, Staff Road; *Lumley's*, Lawrence Rd.; *Victoria*, Staff Rd.; *Grand*, Metropole, *Savoy*; *Cecil*
AGENTS *R. Norton & Co.* undertake the clearing and forwarding of goods between Ambala, Kasauli, Sabathu, etc.
CLUB. *Sirhind*.
BANK: *Imperial*.
MISSION *American Presbyterian*

AMBARNATH, 512, temple

AMBASAMUDRAM, 668, waterfalls.

AMBER, 222, fortress

AMGAON, 139 (R.), D.B.

AMHERST, 712, R.M., sea side

AMINGAON, 487

AMMAYANAYAKKANUR, or Kodai Kanal Road, 661 (R.), D.B.K.

AMRAOTI, 134, D.B.K.
BANK *Imperial*.

AMRITSAR, 336-339 (R.) D.B.K., golden temple fort
HOTELS *Cambridge*, Albert Road, *Amritsar*, The Mall, *Princes*, near Rly Station, *Imperial*
Amritsar can be visited from Lahore (24 m. by road)
CHURCH *St Paul's*
CLUB *Amritsar*
BANKS *Imperial, National of India, Lloyds, Chartered of India, Allahabad, Punjab and Sind*

ANAKAPALLI, 509, Buddhist remains

ANAND 196, R.M.

ANANTAPUR, 582, D.B., Penukonda fort

ANDHER, 168, stupas

ANHILWARA (Patan), 206, old city

ANJENGO, 668, fort.

***ANURADHAPURA**, 752-756 (R.) Hotel, old city English Church

ARCOT, 600-605, D.B.; fort

ARKONAM, 532 (R., R.R.),

AROR, 398, ancient city

ARRAH, 60, D.B.K. Mutiny monument.

ARSIKERE, 588 (for Sravana Belgola) (R.), D.B., Jain bastis, etc

ASANSOL, 65 (R.), D.B.K.
BANK: *Imperial*

ASIRGARH, 43, R.M., fort ruin

ASSAM, 486.

ASSAYE, 85, battlefield.

ATGAON (for Tansa Lake), 37, D.B.

ATTOCK, 375; D.B.K., R.M., fortress.

AUNDHA, 85; Museum paintings.

***AURANGABAD**, 82 (**R.**); D.B.K., 2 R.H.; Railway Hotel; fort, Buddhist caves, for Ellora 13 m. and Ajanta 60 m

AVA, 699, old city

AVANTIPUR (Kashmir), 388, old capital temples

AZAMGARH, 404, D B K, R.H

AZHIKKAL, 642

AZIMGANJ, 460, D B K

B

BABA BUDAN HILLS, 587, planting

BADAMI, 571, D B K 2 R H, old capital, Brahman and Jain caves, for Pattadakal 10 m

BADARPUR, 491, (**R.**).

BADLI-KI-SARAI, 299, battle

BADNERA, 134 (**R.**), D B K

BADULLA, 736, R H, waterfall

BANK: *Ua*

BAGH, 148 2 R H, Buddhist caves, paintings

BAHAWALPUR, 396; D B K

BAHRAICH, 421, D B K, R H

BAHURIBAND, 46 (see Sihora Road), ancient city.

BAIDYANATH, 54, old capital

BAKHTYARPUR, 65, D B, for Nalanda

BALASORE, 493 (**R.**), D B K Old settlement.

BALHARSHAH, 135, D B K Gond fortress

BALRAMPUR, 421, D B, for Saheth Maheth

BALSAR, 188, R H

BALUGAN (for Chilka Lake), 506, R.H.

BAMRAULI, 40, aerodrome, for Allahabad

BANAVAR, for Halebid, 586; D B

BANBASSA, 417, Sarda barrage

BANDA, 175 (**R.**), D.B.K., R H; fort.

BANDARAWELA, 736, hotel, hunting.

BANDEL, 190; bridge

BANDIKUI, 224 (**R.**).

BANDRA, 30; for Juhu bathing.

***BANGALORE**, 588-591 (**R.**).

AERODROME

HOTELS. *Cubbon, West End* (High Ground); *Lavender's, Central* (St Mark's Square)

MUSEUM. *Mysore Govt Zoo* Lalbagh

MISSIONS *London, Wesleyan Methodist Methodist Episcopal, R C Cathedral, Zenana; United Theological College*

BANKS *Imperial*, St Mark's Square *Mysore Bangalore*

CLUBS: *United Service*, Residency Road, *Century*, Cubbon Park, *Bangalore*, Lal Bagh Road

BANIHAL, 392, route to Kashmir, D B K

BANKAPUR, R H, 584 fort

BANKI, 496, R H

BANKIPORE, 61 (G), D B old Civil Station of Patna

CHURCHES *Christ Ch*, and *St Joseph's Ch*

BANNU, 373, D B

BARABANKI, 421 (**R.**), D B K, R H

BARABAR CAVES, 56, (Asoka)

BARAKAR, 60, D B (3), K

BARAMULA, 385, D B

BAREILLY, 417 (**R., R.R.**), D B K, R.H., old capital of Rohilkhand

HOTELS *Coronation, Civil and Military, Royal Bareilly*, Cantonment D B

CLUB *Bareilly*

BANKS *Imperial Allahabad*

BOOKSELLER London Book Depot.

BARETH, 168, temple

BARGAON, 46, temple.

***BARODA**, 104, (**R.**), D B K, R H. Hotel, Museum and Art Gallery, Bank

AERODROME (Harni)

CHURCHES *Anglican*, consecrated by Bp Heber, 1824, restored 1838, *R.C* and *Methodist*

BAROGH 325 (**R.**), R H

BARRACKPORE, 126, race-course, hunting.

BARWASAGAR, 173, D B, lake

BASSEIN (Bombay), 32; R.H Portuguese settlement.

BASSEIN (Burma), D.B K 715, port, landing-ground

BANK. *Imperial*

BASTI, 465 (**R.**), D.B.K., R.H

BATTICALOA, 738, R.H, Dutch fort singing fish

BAYANA, 248 (**R.**), battle

BEAWAR, 216, D B

BEDNUR (Nagar), 643

BEGAMPET, 548 (**R.**), aerodrome

BELATAL 174, R H, lake

BELGAUM, 541 (**R.**), D B (3) K, Hotel, Jain temples, fort

MISSIONS *Methodist, Episcopal, R C Church*

***BELLARY**, 578 (**R., R.R.**), D B K

BANK *Imperial*

London Missionary Society

BELUR (Mysore), 587 P H, ancient city, temples

***BENARES**, 86-98 (**R.**), D B K, R H

HOTELS *Clark's; Hôtel des Paris, Grand; Paradise*

BANKS *Imperial, of India, Allahabad*

BOOKSELLERS Nand Kishove & Bros

HINDU UNIVERSITY

CHURCHES *St Mary's*, Cantonment, R C Church

MISSIONS C.M.S. (at Sigra), London Mission, Wesleyan, Baptist, Zenana R C

BERAR, 133, cotton and grain.

BERHAMPUR, 507 (**R.**), D B

BANK *Imperial*

BESNAGAR, 167, ancient city.

BETTIAH, 464, D B K

BETUL, 44, D B K R H

***BEZWADA**, 509 (**R., R.R.**), D B K, Victoria Jubilee Museum

BANK *Imperial*

BHABUA, 54, D B K; ancient city

BHADRACHALAM, 560, D B, temple

BHADRAK, 494; D B

BHADRAVATI, 585. Mysore iron works.

BHAGALPUR, 462; D B.K. Club

BANK *Imperial*.

BHAJA AND BEDSA, 516. Buddhist Caves.

BHAMO, 702

BHANDARA, 137, D B K, Club.

BHANGIR (Bhongir), 559 (R.); fort.

BHARATPUR, 248 (R.), D B., fortress

BHARHUT, 46, near Satna, stupa

BHATINDA, 344 (R.), D B, fort.

BHATKAL, 643, port

BHAVNAGAR, 281, D B K

BHAYNDAR, 32, scenery

BHILSA, 167, D B, ancient city

BHITA, 51, ancient cities

***BHOPAL**, 160-162 (R.), D B

BANK *Imperial*

HOTELS *Ruby, Bhopal*

BHOR GHAT, 512

BHUBANESWAR, 496-501 (R.); D B, R H, temples

BHUSAWAL, 42 (R.) D B, R H

***BIDAR**, 548, D B, fort, museum

BIDERRA, 130, battle

***BIJAPUR**, 561-570 (R.) D.B (3), leased for catering, old capital, Museum

BIJNOR, 416, D B K

BIKANER, 214, D B

BILASPUR, 140 (R.), D B.

BINA, 168 (R.), D B h., ruins at Eran.

BIRUR, 585 (R.), for Shimoga.

BITHUR, 436, R.H.; legends

BITRAGUNTA, 511 (R.).

BOBBILI, 508, D B; battle

BOLAN PASS, 408

BOLARUM, 558.

***BOMBAY**, 1-26: (R.) at Ballard Pier, Victoria Terminus, Bombay Central

BED-, DRESSING-, BATH ROOMS at the Victoria Terminus (main line) and the G.I.P.R.

WAITING-ROOMS at Central Station, Byculla (B.B.C.I.R.).

HOTELS. *Taj Mahal; Green's* near the Apollo Bunder; *Majestic*, Wodehouse Road, near Apollo Bunder, *Grand*, Ballard Estate; *Apollo*, corner of Colaba Causeway, near Apollo Bunder.

RESTAURANTS *Victoria Station, Majestic, Green's* (near Apollo Bunder, Ritz and *Cornaglia*), Marine Drive, *Mongini*, Churchgate St. The best restaurants are the Grill of the Taj Mahal and Green's

AGENTS *Thos Cook & Son*, Hornby Road and Taj Mahal Hotel, *Grindlays*, Nicol Road, *Cox & King*, Hornby Road, *American Express Co*, 240 Hornby Road. These firms undertake all business in connection with travelling and financial arrangements, forwarding of goods, engaging of Indian servants, etc

Thos. Cook & Son supply information about excursions (*e.g.* to Elephanta and Kanheri)

BANDS On certain days of the week at the *Yacht Club*, the *Gymkhana* and *Willingdon Clubs*, the *Hanging Gardens* (Malabar Hill), and the *Victoria Gardens*, Byculla.

BANKS *Imperial, of India*, Bank Street, Elphinstone Circle, *Chartered, of India*, Esplanade Road, *Hong-Kong and Shanghai*, 49 Churchgate Street, *National, of India*, Esplanade Road, *Mercantile, of India*, 54 Esplanade Road, *Comptoir National d'Escompte*, 24 Bruce Street, Fort, *Allahabad*, Apollo Street, *Eastern*, Churchgate Street; *International Banking Corporation*, 12 Churchgate St; *Lloyds*

BATHS Salt-water *Swimming*, on *Back Bay*, and at *Breach Candy* (Bombay Durkin).

BOOKSELLERS. New Book Co and Taraporevala, both in Hornby Road; Thackers, Rampart Row

CHURCHES: *Anglican: St Thomas's Cath*, Churchgate St.; *All Saints*, Malabar Hill; *St Peter's*, Mazagon; *Christ Church*, Byculla. *S.P.G. Church*, Ratnapura Road. *Church of Scotland*: *St Andrew's*, corner of Apollo St, another in Waudby Rd. *R.C. Cathedral*, Wodehouse Rd, *N.S. da Esperanza*, Kalbadevi, *N.S. da Gloria*, Parel

CLUBS. *Bombay*, Marine Drive (men only)

Willingdon Sports, Clerk Road, Mahalakshmi

Western India Turf, Club Road, Byculla

Orient, Kennedy Sea Face

Cricket Club of India, Brabourne Stadium.

Western India A.A., Fort

Bombay Hunt

The Bombay Gymkhana and *Golf*, Waudby Road, *Commercial Gymkhana*, Wodehouse Road

Ladies' Gymkhana, The Ridge, Malabar Hill, with lawn tennis and badminton grounds

CONSULS: There are representatives of most nations.

HOSPITALS See Special Index, p. 1

LIBRARIES *Asiatic Society*, in the Town Hall, the *Sassoon Institute*, Esplanade (visitors can join the lending library for a week).

MUSEUMS *Prince of Wales, Victoria and Albert, St Xavier's College*

MARKETS *Crawford*, for fruit, vegetables, flowers, poultry, meat, etc *Native Bazaar*, in Sandhurst Road

Cloth, in Indian Quarter, Shaikh Memon Street.

Copper, close to Momba devi Tank, Indian Quarter

MEDICAL MEN The European Hospital is St George's Hospital with its highly qualified resident staff

NEWSPAPERS. *Times of India* (1838), besides a number of Indian papers. Evening papers: *Bombay Chronicle, Evening News of India*. The *Times of India Illustrated Weekly* is noted for its admirable reproductions of Indian scenery

NURSES: The "All Saints'" Sisters: see p 25.

STEAMSHIP AGENCIES: *P. & O. S.S. Co.*, Mackinnon, Mackenzie & Co., Ballard Road.

British India S.N. Co, Mackinnon, Mackenzie & Co., for Calcutta, and coast ports, Karachi, Persian Gulf, Burma, and E Coast of Africa

Hall and *Ellerman's City Lines*, Fort, Killick Nixon & Co, *Home Street*

Anchor Line (to Liverpool), Graham's Trading Co, Graham's Buildings, Fort.

Bombay Steam Navigation Co (Shepherd & Co), Killick, Nixon & Co, 120 Frere Road—for neighbourhood of Bombay, Ratnagiri, Goa, Mangalore

THEATRES The *Excelsior*, *Empire*, just off Hornby Road, and the *Opera House* near Sandhurst Road Bridge, and many Cinematograph Theatres

TRAMWAYS

UNIVERSITY

An excellent MOTOR-OMNIBUS service covers the residential and business quarters of the city

BORIVLI CAVE, 30

BOSTAN, 410 (R.)

BOWRINGPET (for goldfields), 598 (R.), D B

BRINDABAN, 257; temples

BROACH, 102-194 (R.), D B; ancient city.

BANK: *Imperial*.

BUDAON, 417 (R.), D B K, R B

BUDDH (BODH) GAYA, ; ancient city

BULDANA, 133, D B K

BUNDELKHAND, 170.

BUNDI, 139, D.B.K

BURDWAN, 66 (R.), D.B K.

BURHANPUR, 42, D B.

BUXAR, 60 (R.), D.B K, battle.

C

CACHAR, 485; D B K

CAIRO, xli.

CALCUTTA, 102-127; (R.) at Howrah and Sealdah Termini For further information consult Thacker's Calcutta Directory

HOTELS *Grand*, Chowringhi Road, and *Great Eastern*, Old Court House St, Pelitis Others are *Spence's*, Wellesley Place, *Continental*, Chowringhi Road, *Bristol*

BOARDING HOUSES In the cold weather season accommodation must be secured weeks beforehand

Mrs King's, 1 and 2 Little Russell Street, and 48 Theatre Road, *Mrs Lord* (*Lord's Ltd*), 233 Lower Circular Road, *Mrs M'Donnell*, 1 Bishop Lefroy Road, 2 Theatre Road

RESTAURANT AND CONFECTIONERS *Firpo*, 18-2 Chowringhi, *Pelitis*, 11 Govt Place, *Gt Eastern*, *Grand Café* entrance Corporation Place, *Trocadero* 10 11 Esplanade East, *Bristol Grill*, Lyon's Range, *Empire*, Hindustan Insurance Buildings, Hogg St

BANKERS AND AGENTS *Grindlays*, 6 Church Lane, *T. Cook & Son, Ltd*, 4 Dalhousie Sq East, *Cox & King*, Wallace House, 5 Bankshall Street, *American Express Co*, 14 Government Place, East

BANKS *Imperial*, *of India*, 3 Strand, *Chartered*, *of India, Australia, and China*, 5 Clive Street, *Merc., of India, Ltd*, 6 Clive Street, *Hong-Kong an. Shanghai Banking Corporation*, 31 Dalhousie Sq, *National, of India*, 104 Clive Street, *Allahabad*, 6 Royal Exchange Place, *Lloyds*, 101-1 Clive St and 37 Chowringhi, *International Banking Corporation*, 4 Clive St, *Eastern*, 1 Clive St.

BATH, on the Esplanade, admission through members

BOOKSELLERS *Thacker Spink, Newman & Co., Calcutta Book Co*, College Sq.; *Chuckervarthy, Chatterjee*, College Sq.; *U N. Dhur & Co*, Wellington St.; *P. C. Dutt*, Suri Lane, *Kali Charan & Co*, Municipal Market *Kamala Book Depot*, College Sq.: *Oxford Book & Stationery Co*, Park St.

CHURCHES (*Anglican*). *St Paul's Cathedral*, *St John's*, formerly the Cathedral, *The Old Church*, Mission Row (C M S.), *St Peter's*, in the Fort, *St Thomas's* (the Free School Church)

(CHURCH OF SCOTLAND). *St Andrew's*, Dalhousie Sq.; *Church of Scotland*, *Wellesley Sq*

OTHERS *Wesleyan*, Sudder St, *Baptist Chapels*, Bow Bazar and Circular Road, *Congregational Union Chapel*, Dharmtolla and Hastings, *American Meth Episcopal*, Dharmtolla, *R C*, *St Thomas*, Middleton Row *Cathedral*, Portuguese Church Street, Dharmtolla Road.

CLUBS *Bengal*, 33 Chowringhi Road Members of this Club may use the *Madras*, *Hong Kong*, and *Shanghai Clubs*, and *vice versa* *United Service*, 31 Chowringhi, *Calcutta* (Europeans and Indians), 241 Lower Circular Rd., *New* 38 Chowringhi, *Saturday*, 7 Wood St., *R Calcutta Turf*, 11 Russell St, *R Calcutta Golf*, *Tollygunge* (country), *Jodhpore* (country) Automobile of Beng l

CONSULS All leading countries are represented at Calcutta by Consuls.

LIBRARY *Imperial*.

MISSIONS *Oxford Mission*, 42 Cornwallis Street and Behala

S P.G, 224 Lower Circular Road

The *Clewer Sisters*, working since 1881, have charge of the Canning Home for Nurses, European Girls' Orphanage, and Pratt Memorial School.

C.M.S., 10 Mission Row. *Church of Scotland*, Cornwallis Square

Baptist Mission Society, 42 Lower Circular Road

The *Additl. Clergy Soc.*; the *Methodist Episcopal Mission*; the *L.M.S.*; the *Wesleyan Mission*; the [illegible] *Mission* all have hdqrs. in Calcutta.

MUSEUMS. *Indian, Victoria Memorial.*

NEWSPAPERS. *Statesman*, Chowringhi Square; *Capital*, 1 Commercial Buildings; *Commerce*, 6 Mission Row; Indian papers in English are *Amrita Bazar Patrika*, *Hindustan Standards*

NURSES *Lady Minto's Nursing Assocn* (1907), 4 Hungerford St, *Calcutta Hospital Nurses' Assocn*, Secy, A R Nicholson, Allahabad Bank Building

SOCIETIES *Asiatic Society of Bengal*, 1 Park Street, founded by Sir William Jones, *Calcutta Historical Society*, Room 57, 3 Govt Place, West; *Institn of Engr's. (India)*

STEAMSHIP AGENCIES (General)

Mackinnon, Mackenzie & Co, 16 Strand Rd, Agents *P & O and British India S N Companies*

Ellerman's Hall & City Lines, Gladstone, Wyllie & Co, 4 Fairlie Place

Clan Line Steamers, Jas *Finlay & Co.*, 1 Clive St

Anchor Line, Graham's Trading Co, 9 Clive Street

STEAMSHIP AGENCIES (Local) *River S.N Co Macneill & Co*, 2 Fairlie Place

Orissa Carrying Company's Steamers, Macneill & Co, plying between Calcutta and Chandbally

Calcutta S N Co, Hoare, Miller & Co, 5 Fairlie Place.

THEATRES *New Empire*, Surendranath Banerji St (off Chowringhi), *The Globe*, Lindsay Street, *Elphinstone Picture Palace*, Chowringhi Place, *Madan*, Surendranath Banerji St, *Picture House*, Chowringhi, *Regal Cinema*, Surendranath Banerji St Indian Theatres *Corinthian*, Dhurrumollah, *Star*, Cornwallis St., *Russa*, Bhowanipore; *Alfred*, Harrison Road.

UNIVERSITY.

CALICUT, 639 (O.); D.B.K.; old city.

HOTEL. *Empress, Beach.*

STEAMSHIP AGENTS: *Andrew & Co, B.I.S.N Co.*

BANK: *Imperial*

BOOKSELLER: D S Rao.

CAMBAY, 196, ancient port

CAMPBELLPUR, 373 (R), D B.

CANNANORE, 641 (R) D.B K (Portuguese settlement)

HOTELS *Seaview, West cliff*

CAPE COMORIN, 667, D B, State Guest House

CASTLE ROCK, 542 (R.), Scenery

CAUVERY FALLS, 592, D B K. Motor-buses from Maddur, 30 m., Hydro electric station

***CAWNPORE**, 431 436 (R., E.R.), D B K., 2 R.H.

HOTELS *Berkeley, Civil and Military, Empress* (Cantonment)

CLUB *Cawnpore*, Mall

BANKS *Imperial, Allahabad, National, of India, Chartered, Tata's*

BOOKSELLERS Advam Bros

MISSIONS the *S P G* (Mission House, Christ Church) have charge of Christ Church School, Generalganj School, and a Girls' Boarding School

The *Ladies' Association* (*S P G*) have six schools and work in the Zenanas

Woman's Union Missionary Society of America.

Methodist Epis. Mission

R C Church

CEYLON, 720 764

CHAIBASA, 142, D B K

CHAINPUR, 54, fort

CHAKRADHARPUR, 141 (R.), D B K

CHAKRATA, 415, D B K

HOTEL. *Snow View*

CHALISGAON, 41; D B

CHAMAN, 4 to.

CHAMBA, 341, D.B

MUSEUM.

CHAMPANER, 246, fortress

CHANDA, 135, D B, R H, ancient city (Bhadravati), Gond capital

CHANDAUSI, 427 (R), D.B; Railway College.

BANK *Allahabad.*

CHANDERI, 169, R H; old city

CHANDERNAGORE (French), 128.

HOTELS: *H de Paris, Thistle, Carlton, Riviera, Prince of Wales*

CHANDNI (for Asirgarh), 43

CHANDOR, 41, fort.

CHANDPUR, 485 (R.); R H

BANK *Imperial*

CHANDRAGIRI, 532, fort.

CHANNAPATNA, 591 Muslim tombs

CHAPRA, 464, D B K

BANK *Imperial*

CHATRAPUR, 507, D B

CHATTISGARH, 139.

CHAUL, 29; R B, Portuguese forts.

CHERAT 375, D B

CHERRAPUNJI, 489, D B K, Scenery

CHHINDWARA, 43, D B K, C H coal field

CHICACOLE, 507, D B, R H

CHIDAMBARAM, 649, D B, temples, Anamalai University, battle

CHILIANWALA, 303, D B battlefield.

CHINDWIN RIVER, 716-719

***CHINGLEPUT**, 622 (R), D B, fort

CHINSURA, 130 D B, Dutch settlement

CHITALDRUG, 585, D B K. fort.

CHITORGARH, 152-156; State D B K, Rajput fortress, Jain towers

CHITTAGONG, 485 (R.), D B K

CLUB *Chittagong*

BANKS *Imperial, of India, National, of India*

MISSIONS, *Baptist, R.C.*

CHITTAPUR, 547 (for Nagai, old city)

CHITTOOR (Madras), 532 (R.), D.B.K., Hyder Ali monument

CHONDI, 85, R H, Anndha temple

CHOTA NAGPUR, 143

CHUNAR, 53, R.H, fort

CLOSEPET, 591 D B K

COCANADA, 509, R.H, port

BANK *Imperial.*

COCHIN, 636; D.B.K.; Malabar Hotel, Club.

CHURCHES. *Ang Church, R C. Cathedral.*

BANKS: *Imperial; National, of India.*

COIMBATORE, 630, D B
BANK *Imperial*

***COLOMBO**, 734-737

AERODROME

HOTELS *Grand Oriental* (usually known as the G.O.H.); *Bristol*, York St; *Metropole*, Queen St *Galle Face*, close to the sea, 1½ m from the landing place Swimming-bath attached

The *Grand* at *Mount Lavinia*, 7 m. distant by rail from Colombo, is situated on a promontory overlooking the sea Excellent fish tiffins on Sundays Sea bathing

AGENTS *H Cave & Co*, Queen St, for Cox & King, *Thos Cook & Son*, Lloyds Building, Princes St, *George Steuart & Co*, 14 Queen St., for Coutts & Co; *Grindlays*, c/o Chartered Bank, *American Express Co*, 1 Queen St

BANKS *National, of India; Imperial, of India, Hong-Kong and Shanghai Chartered, of India, Australia, and China, Mercantile, of India P. & O Banking Corp. Eastern*

CHURCHES. *Anglican. Christ Church Cathedral*, Mutwal, *S Peter's*, The Fort, *Christ Church (C M S)*, *Trinity Church*, Maradana, *S. Michael's*, Polwatte, *St Paul's*, Milagriya in Byzantine style and others *R.C St Lucia* (Cathedral), *St Philip Neri* (in Norris Rd opp Fort rly sta.) and others *Church of Scotland · St Andrew's*, near the Galle Face Hotel *Nonconformist; Wesleyan*, Colpetty, Maradana, and Pettah, *Baptist*, Cinnamon Gardens, *Dutch Church*, Wolfendahl, and others

EUROPEAN CLUBS *Colombo*, on the Galle Face, *Golf*, 3 m. from The Fort, *Garden*, Victoria Park; *Prince's*, Reid Avenue, Cinnamon Gardens, E.

CONSULS · in the Fort.

HOSPITALS: *General Civil*, with wards for Europeans, Regent St., *Eye*, Ward Place.

MISSIONS · *S.P.G*, St Thomas's College, Mount Lavinia, *C M S*, Galle Face, Christ Church, St Luke's, and several schools

E Grinstead Sisters, Schools and Orphanage (at Polwatte)

MUSEUM

POST OFFICE in Queen Street, TELEGRAPH OFFICE in Lower Chatham Street, each 5 min walk from landing jetty

RAILWAY AND COACHING RATES AND CARRIAGE AND RICKSHAW FARES, see *The Pocket Time and Fare Table*, 10 cents published by Government

STEAMSHIP AGENCIES

The P & O and B I Companies, office is in the Victoria Arcade, opposite the G O H *Agents*, Mackinnon, Mackenzie & Co

Orient Agents, Whittall & Co

Bibby Line Agents, Carson & Co

Ellerman's Hall and City Lines Agents, Aitken, Spence & Co

Anchor Line Agents, Delmege, Forsyth & Co.

Clan Line Agents, Jas Finlay & Co.

CONJEEVERAM, 617-622, D B, ancient city, temples

COOCH BEHAR, 487 (R.), D B K.

*COONOOR, 631 (R.), D B K, scenery.

HOTELS *Glenview, Hill Grove.*

BOARDING HOUSES *Belmont, Hampton; Hanson Lodge, Clovelly, Fairway, Bakeleigh*

CLUB *Coonoor*

PASTEUR INSTITUTE

COORG, 597

CORYGAUM, 524, battle.

COX'S BAZAR, 485, seaside.

CUDDALORE, 648 (R.), D B, Fort St David

STEAMSHIP AGENTS· *B I S N Co*, Parry & Co

BANK *Imperial.*

CUDDAPAH, 531 (R.), D.B.K.

BANK: *Imperial*

CUMBUM, 581, D B, R.R., lake

CUTCH, 226.

***CUTTACK**, 495 (R.), D.B K., Museum, Ravenshaw College, Utkal University

BANK *Imperial*

CLUB within the Fort enclosure

MISSIONS *Orissa Baptist* (1839), *R C Church*

D

DABHOI, 194, fort

DABO, 400, battle

DACCA, 483 (R.) D B K
Museum, Club

AERODROME (Dhanmondai)

BANK *Imperial*

BOOKSELLERS Basak Book Co

MISSIONS *Baptist, R C Cathedral*

DAGSHAI, 324.

DALHOUSIE, 341

HOTELS *Stiffle's Grand view, Arrannoor*

DAL LAKE (Kashmir), 387.

DALTONGANJ, 53, D.B K

DAMAO (Portuguese), 188
2 K B.

DAMOH, 169, D.B K.

DANUBYU, 709, cheroots

DARBHANGA, 463, D.B.K
BANK *Imperial.*

***DARJEELING**, 475-479, D B Natural History Museum.

HOTELS · *Mount Everest*, with fine views, *Rockville, Central; Bellevue, Park · New Elgin; Garreti's; Grand, Woodlands*

BOARDING HOUSES: *Ada Villa, Beechwood, Alice Villa, The Labyrinth, Kenilworth.*

CLUBS *Darjeeling*, Auckland Road, *Gymkhana*, near St Andrew's Church, and *Chowrasta.*

BANKS. *Imperial, of India; Lloyds*

BOOKSELLERS · Oxford Book and Stationery Co.

CHURCHES: *St Andrew's, Anglican, St Columba's,*

Scotch; *Union Chapel*; Anglican and R C. Chaplains at *Jalapahar* and *Lebong Cantonments*; *Anglican Chapels at St Paul's and Diocesan Schools*, *R.C Chapel, St Joseph's School*, North Point, and *Church in Loretto Convent*.

HOSPITAL. *Victoria*

DARYA KHAN, 365 (R.), D B.

DATIA, 176, R.H

DAULATABAD, 73, D B, old fortress (Deogiri)

DAURALA, 330, for Sardhana.

DEESA, 207. D B

DEHRA DUN, 414 (R.); D.B.K, 2 R.H Railhead for Mussoorie (q v)

HOTELS *Royal*, *Gresham*

CLUB *Dehra Dun*.

BANKS. *Imperial*, *Allahabad*, *Bhagwan Das & Co*

DEHRI-ON-SON, 55, D.B K, 2 R H

***DELHI**, 280-318 (R.).

HOTELS *Maidens*, Alipur Road, in the Civil Lines; *Cecil*, in the Civil Lines, near Ludlow Castle (open Oct. to April only), *Swiss*; *Elysium*; *Imperial* (New Delhi).

AERODROMES *Willingdon*, Palam.

CLUBS. *Imperial Gymkhana*, Kingsway, *Chelmsford*, New Delhi.

BANKS *Imperial*, *National*, *of India*; *Chartered*, *Mercantile*; *Lloyds*; *Allahabad*; and others. New Delhi: *Imperial*, *Lloyds*

AGENTS. *Thos Cook & Son*, New Delhi, *Grindlays*

ART. Imvie Schwaigor, Alipur Road, Ivory Palace, Connaught Place

BOOKSELLERS: Chand & Son; Oxford Book and Stationery Co

MUSEUMS. *Fort* (2); *Municipal*. New Delhi *Central Asian*.

NEWSPAPERS. *Statesman* (Delhi edn.), Statesman House, Connaught Circus. *Hindustan Times*; *Indian News*; *Chronicle*.

CHURCHES: *St James*, *St Stephen's*, of Cambridge Mission; R.C. *Church*

New Delhi: *Church of the Redemption*, *Wesleyan Church*

UNIVERSITY

MISSIONS *S P G.* and *Cambridge*; *Baptist*; *Baptist Zenana*; *Methodist*

DEOGARH, 169 (*via* Jakhlaun), ancient temples

DEOLALI, 37

HOTELS *Coronation*, *Grand*

DEOLI, 159, D B K

DERA GHAZI KHAN, 366, D B.K.

DERA ISMAIL KHAN, 365, D B.K., 2 R H

DHANBAD, 60 (R.), D B K., coal-field.

BANK: *Imperial*

DHAR, 147, D B K, old capital, 151.

DHARAMTAR, 534 Bombay Steam Navigation Launch daily

DHARMAVARAM, 582 (R.).

DHARMPUR, 324. R H

DHARMSALA, 341, D B, resort.

HOTEL *Switzer's*.

DHARWAR, 583, D B (5) K Fort.

Kanarese Evang Mission

DHAULI, 501, Asoka Rock Edict

DHOLA, 229 (R.).

DHOLPUR, 186 (R.), D B

DHONE, 579 (R.), D B.

DHUBRI, 487, D.B K.

DHULIA, 41 (R.), D.B.K, on Bombay-Agra Road

BANK: *Imperial*

DIAMOND HARBOUR, 132, R.H.

DIBRUGARH, 491 (R.), D.B.K Club

BANK *Imperial*.

DICHPALLI, 85, 2 R H; Brahman temple.

DIG, 256, D B, fortress

DIGHAGHAT, 65; Ganges ferry.

***DILWARA** (Mount Abu), 207, Jain temples.

DINAPORE, 61 (R., R.R.), D.B

DINDIGAL, 660 (R.), D B K, fort.

DIU (Portuguese), 243.

DIYATALAWA, 736.

DOKRI, 405 (for Mohenjodaro); prehistoric city.

DOMEL, 584; D B.K.; customs post.

DONGARGARH, 139 (R.), R.H., hotel

DORNAKAL, 560 (R.) (for Singareni). Anglican Diocese

DUM DUM, 125, aerodrome and hotel (small).

DWARKA, 245, D B; Brahman temples, port.

E

ELEPHANTA IS., 26; Brahman caves

ELLICHPUR, 134, D.B.K

ELLORA, 76-82, D B, State Guest House; R.H at Rauza (4 m.), caves.

ELLORE, 509 (R.), D.B.

BANK: *Imperial*

ENGLISH BAZAR (for Gaur), 469, D B

ENNUR (Ennore), 511, D.B, seaside

ERNAKULAM (Cochin), 635, D B K, Guest House

ERODE, 629 (R., R.R.), D.B.

BANK *Imperial*.

ETAWAH, 430 (R.), D B K, old city

BANKS. *Imperial*, *Allahabad*.

EVEREST, MOUNT, 476

F

FAGU, 327; D B.; scenery, 12 m. from Simla.

FALTA, 132; D B; by river and rail from Calcutta

FARDAPUR, 67; 2 D.B.K., R.H.; for Ajanta (3 m.).

FARIDKOT, 345; R.H

FARRUKHABAD, 430 R.H.

BANK: *Imperial*.

FATEHGARH, 429, D.B.K., R H; fort.

FATEHPUR, 437 (R.); D.B.K., R.H.

FATEHPUR-SIKRI, 274-279.

FAZILKA, 345, D.B.K.

FEROZEPORE, 346 (R.); D B.K, R.R.H; battlefields.

BANK, *Imperial* (in Cant.).
CHURCHES: *Church of England, Roman Catholic* and *Wesleyan* in Cant; *American Presbyterian Mission* in the City

FORT SANDEMAN, 410 (in Zhob Valley), D B K

ERASERPET (Coorg), 597, on Cauvery R, D B K

FRENCH TERRITORY, 647.

FURKATING, 490 (R.), D B

FYZABAD, 432, D B K, 2 R H (for Ajodhya), Oudh capital
MUSEUM
BANKS *Imperial, Allahabad*

GADAG, 573 (R), D B
temple

GADWAL, 580, old city, fort

GALIS, 369, hill stations near Murree

GALLE, 744 (R), fort
HOTEL *New Oriental*
STEAMSHIP AGENCIES *Clan Line*, Clark, Spence & Co, *British India S.N Co*, E Coates & Co; and *Asiatic Steamship Co*, John Black & Co
BANK; *Mercantile, of India, Ltd*

GANGTOK (Sikkim), 479, D.B.

GANJAM, 507, D B

GARHWA, 53; ancient temples

GAUHATI, 487 (R.), D B K
Museum, road to Shillong

GAUR, 470, old city

GAWILGARH, 134, fort

GAYA, 55-58 (R.), D B.K., landing-ground
BANK *Imperial*

GERSOPPA FALLS, 585, 2 R H; scenery.

GHAZIABAD, 328 (R.), R H., battle

GHAZIPUR, 464; D.B K, R.H.

GHOOM, 475.
HOTEL: *Pines.*

GIBRALTAR, xxxiii.

GIELKHOLA (Teesta Bridge), 474, for Kalimpong

GINGEE, 644, R.H, old fort

GIR FOREST, 240, lions

GIRIDIH, 65, D B.K; coalfield.

GIRNAR MOUNTAIN, 234, Jain temples

GOA (Panjim), 543-547
British Consul at Mormugao
HOTELS *Republica, Crescent, New Central*
Motors available for drive to Old Goa
STEAMSHIP AGENTS *BISN Co*, A B D Souza (Mormugao), *Bombay S N Co*, Pillick, Nixon & Co (Mormugao), *Goa Trading Co* (Nova Goa)

GOALPARA, 487, D B K, on Brahmaputra R

GOALUNDO GHAT, 482
STEAMERS (comfortable), daily mail service to Naraingani for Dacca, and to Chandpur for Chittagong. Also steamers up the Ganges to Patna, and up the Brahmaputra to Dibrugarh

GOBARDHAN, 255, temples

GODHRA, 247, R H, in Panch Mahals
BANK *Imperial*

GOKAK ROAD, 541 (R)

GOKTEIK, 700, D B K, high railway viaduct

GOLCONDA, 555, fortress

GONDA, 421 (R.), D B K, R.H

GONDAL, 244 (R), D B, Guest House

GONDIA, 137 (R.), D B K, R H

GOONA, 248, D.B K

GOOTY, 530 (R.), D B, fort

GOPALPUR, 507; seaside
HOTELS *Yatton Hall, Blue Haven*

GORAKHPUR, 465 (R), D B K, R H.
BANKS, *Imperial* and *Allahabad*

GUDUR, 511 (R.), D B.K

GUJRANWALA, 360 (R.), D B K, 3 R.H.; birthplace of Ranjit Singh
BANK *Imperial.*

GUJRAT, 363, D.B.K, battlefield.

GULBARGA, 528, D B, fort

GULMARG (Kashmir), 390
HOTEL *Nedou's.*
Boarding houses, camping grounds
BANK *Lloyds*

GUNTAKAL, 530 (R).

GUNTUR, 581 (R), D B K, capital Northern Circars
BANK *Imperial*

GURDASPUR, 340, D B K, Trimmu Ghat battlefield

GURGAON, 226, D B K, R H

***GWALIOR**, 176-186 (R.)
The riv sta is about 1½ m from Lashkar (New Town)
HOTEL *Grand* at Lashkar
CLUB *Elgin.*
BANK *Imperial*
MISSIONS *Methodist Episcopal, Do Zenana* Mission R C Church
MUSEUM In Fort (Gujari Mahal)

GYANTSE (Tibet), 482, R.H

GYARASPUR, 168, caves, colossus

H

HAFLONG, 491
HOTEL

HALEBID, 580, old capital, temples, Jain Bastis.

HAMBANTOTA, 745 R H, 1 T Tissamaharama, old city

HAMIRPUR 175, D.B K., R H

HAMPI (Vijayanagar) 575-578, D B K at Kamalapur, old capital

HANAMKONDA, 559, D B., temple

HANSI, 345, D B, fort.

HARAPPA, 309 (*via* Montgomery), prehistoric city
MUSEUM

HARDA, 43, D B

HARDOI, 421 (R.), D B

HARDWAR, 412, D B.K, pilgrimages

HARIHAR, 584 (R.), D B., temple.

HASSPUR, 372, D.B.K.; monument.

HARNAI, 411 (R.), D B, R H., for Loralai.
HARPALPUR, 174 (R.), for Nowgong and Khajraho
HASSAN ABDAL, 372, D B K, Lalla Rookh's tomb
HATHRAS, 429 (R.), R H, fort.
BANKS *Imperial* and *Allahabad*
***HATTON**, 733 (R.).
HOTEL *Adam's Peak*, for Adam's Peak, *q v*
BANK *Hatton*
MOTORS for Talawakelle to view the Devon and St Clair Falls, and for Laxapana for ascent of Adam's Peak
HAVELIAN, 372 (R.), for Abbottabad
***HAZARIBAGH**, 58, D B K, *via* Hazaribagh Road
HOTELS *Rose Cottage, Compton Court*
HEHO, 693 (R.), D B, for Taunggyi
HENZADA, 708 (R.), D B, 2 R H
HINDUBAGH, 411, chrome
HINDUPUR, 582 (R.), old temple at Lepakshi.
HINGOLI, 85 (R.)
HISSAR, 344 (R), D B, cattle ranch
HMAWZA (for old Prome), 707
HOOGHLY, 129; early settlements
HOSDURGA ROAD, 585, for Marikanave Lake
HOSHANGABAD, 160, D B K
HOSPET (for Vijayanagar), 575 (R.), D B. Apply to Stationmaster for conveyance
HOTGI, 528 (R.).
HOTI MARDAN (for Shahbazgarhi), 375, R H
HOWRAH, 127
HSIPAW, 700; D B
HUBLI, 584 (R.), D B (3) K R.H.
BANK *Imperial*
***HYDERABAD** (Deccan), 548-558
HOTELS *Percy's, Vaccafi's, John's, Royal, Rock Castle*
MUSEUM
BANKS *Imperial; Central.*
OSMANIA UNIVERSITY.
HYDERABAD (Sind), 398 (R.), D B K, fort, battlefields.
MISSIONS *C M S.* and Church Schools.
BANK *Imperial*
BOOKSELLER Hyderabad Book Depot

I

IDAR, 205, D B
IGATPURI, 37 (R), D B
CHURCH *Anglican*
RAILWAY INSTITUTE
IMPHAL (Manipur), 490, R H
***INDORE**, 149 (R.), D B
Hotel, Club, and Reading Room Residency Surgeon, and Nursing Home
CHURCHES *English* and *R.C Church*
BANK *Imperial*
ISHURDI, 474 (R.), D B, for Pabna Hardinge Bridge over Ganges
ITARSI, 43 (R.), D B K

J

JACOBABAD, 408, D B K, old frontier post
JAFFNA, 757, R H, Dutch fort
***JAIPUR**, 219-222 (R.), D B K
AERODROME
HOTELS *Jaipur, The New, Kaisar-i-Hind*
BANK *Imperial*
CHURCH All Saints
MUSEUM *Albert*
OBSERVATORY.
JAISALMER, 211; R H, *via* Barmer
JAITPUR, 174, R H, fort
JAJPUR, 494, D B K old capital of Orissa
JAKHAL, 333 (R.)
JAKHLAUN, 169, R.H., for Deogarh, temples
JALALPUR, 364, probable Bucephala.
JALAMB, 133, D B
JALARPET, 628 (R.).
JALGAON, 41; D B (2) K., (for Ajanta Caves, 38 m.)
BANK *Imperial*
JALNA, 85, D B. (for Assaye, 30 m); old city
JALPAIGURI, 474 (R.), 2 D.B.K.
BANK *Imperial.*
JAMALPUR, 462 (R., R.R.).
JAMMU TAWI, 362 D B.K.
JAMNAGAR, 245
JAMRUD, 379; Sikh border fort.
JAMSHEDPUR (Tatanagar), 142, steel works
AERODROME
CLUBS *Baldeh, Golmuri*
BANK *Imperial*
JANGSHAHI, 401 (R.), D B for Tatta
JAORA, 252, D B
JAUNPUR, 423-427 (R.), D B K, R H
JETALSAR, 232 (R).
JHALRAPATAN, 247, D B K
JHANSI, 170-172 (R.), D B K, 2 R H, hotel
BANK *Imperial, Allahabad*
CLUB *Jhansi*
INDIAN CLUB *Silberrad Union*
JHARSAGUDA, 141 (R.), R H
JHELUM, 366 (R.), D B K, R H
JHUSI, 53, ancient capital
JIND, 333, D B
JODHPUR, 211-213, hotel, aerodrome, fort
MUSEUM. *Sardar*
JOGESHWARI, 30, Brahman Caves
JOGINDARNAGAR, 341, hydro electric station
JUBBULPORE, 44-46 (R.), 2 D B, for Marble Rocks
HOTELS *Jackson's; Cowdeary's, Royal.*
BANKS: *Imperial, of India, Allahabad, Central, of India.*
MISSIONS *C M S.*(1854); *C of E Zenana, R.C Church, Wesleyan,* and various *American Missions*
JULLUNDUR, 335 (R.); D B K, R.M, Jubilee Hotel, ancient city.
BANK *Imperial.*
JUNAGADH, 232-239; D B.K, Guest House (apply to Diwan), Girnar Mountain, Asoka stone.
JUTOGH, 325.

K

KACH (for Ziarat), 411, D B K. (May to October)

KAIRA, 197, R H

KAITHAL, 323, R H, fort by lake.

KALABAGH, 373 (R.). Indus bridge

KALANAUR, 340, R H, Akbar monument

KALAW, 693, D B.

HOTEL *Harfield*

KALAWEWA, 751, great tank

Accommodation at Govt Bungalow on the Bund by arrangement beforehand with the Divisional Irrigation Engineer

KALGHAT (Narbada), [illegible], D B K, R H

KALIMPONG, 47[illegible], D B K

HOTEL *Himalaya* (car available)

KALINJAR, 176, R H, fort

KALKA, 324 (R.), D B

HOTEL *Lowrie's*

KALPI (Bundelkhand), 172, R H, old city, battle

KALSI, 414, D B, Asoka Rock edict

KALYAN, 36 (R.).

KAMPTI, 137, D B K.

KANARAK (Black Pagoda), 505, R H, old iron beams

KANAUJ, 429, D B., old capital, battle.

***KANDY**, 731-733, old capital, Temple of the Tooth.

GOLF COURSE

HOTELS *Queen's, Suisse*, facing the lake

CLUB: near Mercantile Bank.

BANKS: *Mercantile, of India, Ltd, National, of India Ltd*

MISSIONS *C.M.S*, sta., Christ Church, Trinity Church, College, and Schools, St Paul's, Baptist Church, Wesleyan Church, Scots Kirk, St Anthony's Cathedral (R C)

The Planters' Association of Ceylon (1854).

KANGRA, 342, D B K

KANHERI, 30; Buddhist Caves.

KAPURTHALA, 335; D B K

KARA (Currah), 438.

***KARACHI**, 402-404 (R.), D B K

AERODROME (Telephone, Drigh Road 27; Telegrams, Airways, Karachi) West Wharf (for seaplanes)

HOTELS *Bristol*, Sunnyside Road, *Carlton*, near Cantonment rly sta., *North-Western*, Queen's Road, *Killarney*

BANKS *National, of India, Imperial, Chartered, Mercantile, Lloyds, Eastern.* 4

AGENTS *Cox & King*, M'Leod Rd, *Eastern Express Co*, corner of Bunder Road and Dunolly Rd *Grindlays*

BOOKSELLER Amalgamated Newsagency

CAFÉS *Grand, New*

CLUBS *Sind*, adjoining the Frere Hall (Library), with sleeping accommodation Members can introduce friends as honorary members for three days

Gymkhana and *Ladies'*, within five minutes' walk from Sind Club

Golf, Polo, Boat, Sailing, Racing

CHURCHES *Holy Trinity, St Paul's* (Manora), *St Patrick's, St Andrew's* (Church of Scotland), *Methodist Episcopal Ch*

MISSIONS *C M S, Methodist Episcopal*

MUSEUM *Victoria.*

NEWSPAPERS: *Daily Gazette* (1879), *Sind Observer, New Times, Dawn*

STEAMSHIP AGENCIES

P & O British India S N Co, Mackinnon, Mackenzie & Co, M'Leod Rd Direct weekly S S meet incoming and outgoing P. & O. steamers to and from Europe at Bombay Weekly steamer to Persian Gulf, coast steamer bi-weekly to Bombay

Ellerman, Hall, Bucknall and City Lines, Forbes, Forbes, Campbell & Co, Ltd., corner of Bunder Rd. and Dunolly Road

Anchor Line, Graham's Trading Co., M'Leod Rd.

Bombay Steam Navigation Co, Killick, Nixon & Co., Bunder Road.

BRITISH OVERSEAS AIRWAYS. Agents: Shaw, Wallace & Co, M'Leod Road

CONSULS constantly changing

KAREPALLI, 560, for Bhadrachellam Temple.

KARIKAL (French), 650

KARJAT, 513, R.R. (2).

KARKAL, 642; colossus

KARLI (Cave), 514, R H., Buddhist

KARNAL, 322, D B K, R H., battle

KARUR, 629, D B, fort, old Chera capital

KARWAR, 584, 643, D B (3) K.

KARWI TARAHWAN, 176, D B, temples

KASARA, 37 (R.).

KASAULI, 324, D B K

CLUB

HOTEL *Grand*

PASTEUR INSTITUTE

KASHMIR, 382-392

KASIA, 465, R H, ancient city (Kusinagara), stupas.

KASIMBAZAR, 467, D B at Berhampore

KASUR, 347, R H, fort

BANK *Imperial*

KATHA, 701, on Irawadi R

KATHGODAM, 429 (R., R.R.), D B K.

HOTEL *Railway*

KATHIAWAR, 220

KATIHAR, 472 (R.).

KATMANDU (Nepal), 464, *via* Raxaul

KAT[illegible]I, 46 (R.), D B K, R H

BANK *Imperial*

KATPADI, 599 (R.), for Vellore

KAUNIA, 487, D B

KAUSHAMBI (Kosam), 51, ancient city Pabhosa (2 m.), rock inscriptions

KAZIPET (for Hanamkonda), 559 (R.), D B

KELANI VALLEY, 739

KHAIRPUR MIR'S, 398

KHAJRAHO, 175, D.B.K., ancient capital, temples, and Museum

KHAJUHA, 437, R.H., battle

KHAMGAON, 133; D.B.

BANK *Imperial.*

KHANDAGIRI, 496, R.H., Buddhist and Jain caves

*KHANDALA, 513, R.H, scenery
HOTEL · *Khandala*

KHANDWA, 43 (R.); D B K
BANK *Imperial*

KHANEWAL, 394 (R.), D B, R H.

KHARAGODA, 227, salt works

KHARAGPUR, 492 (R), D.B
MISSION *Baptist*

KHEWRA (salt mines), 364, 3 R H

KHOJAK PASS, 410

KHOR, 152, old temples 15 m N W of Nimach

KHULNA, 482, round trip

KHURDA ROAD, 501 (R.), D B K, for Bhubaneshwar

KHUSHAB, 365 (R), D B, ancient city

KHUSHALGARH, 373, R H Indus bridge

KHYBER PASS, 378-382 Special permits

KIAMARI, 403, port of Karachi

KINCHINJANGA PEAK, 476

KINDAT (Chindwin), 716, pagoda, northernmost settlement

KIRKEE, 516, battle

KODAIKANAL, 661
HOTEL *Carlton*
Boarding houses, scenery

KODARMA, 58, D B, for Hazaribagh

KOHAT, 373 (R), D B K, 3 R H

KOILPATTI, 666, D B Jain statues.

KOLAR GOLDFIELDS, 398, D.B K
Circuit House at Robertsonpet

*KOLHAPUR, 540, D.B K, R H, Guest House, forts, Irwin Museum, armoury.

KONDAPALLI, 560, R.H, fortress

KONKAN, 512

KOPPAL, 575, forts

KOTAGIRI, 634
HOTELS · *Blue Mountain, Beaulieu Manor*
Club, scenery

KOTAH, 247 (R.), D B K, Chambal bridge

KOTDWARA (for Lansdowne) 416, D B K

KOTKAPURA, 553 (R.).

KOTRI, 400 (R.); D B

KOTTAYAM, 638, D B
Anglican Cathedral

KRISHNAGAR, 466, D.B

KRISHNAGIRI, 628; D B, fort

KUDRA, 54, D B, for Shergarh fort, 16 m

KULU, 342
HOTEL *Mayflower*

KUMBAKONAM, 652 (R.) D B, temple
BANK *Imperial*

KUNDIAN, 365 (R.).

KURDUWADI, 527 (R.), D B

KURNOOL, 580, D B, fortress on Tungabhadra R

KURSEONG, 475 (R), D B
HOTEL · *Clarendon*
Boarding houses, Club, Tea estates Tuberculosis Sanitorium

KURUKSHETRA, 322, legendary battlefield

KUTTALAM, 668 D B, waterfalls

KYAUKPYU, 714, 2 R H

KYAUKSE, 693 (R), D B, R.H, pagoda

L

*LAHORE, 347-360 (R).
AERODROME Flying Club
HOTELS *Cecil (Faletti's)*, Queen's Rd, *Stiffle's*, The Mall, *Sunnyview*, and others
CLUBS *Punjab, Gymkhana, Murray* (in Cantonment)
BANKS *Imperial, Alla habad, Commercial, of India, Lloyds, National, of India, Punjab National*
AGENTS *Grindlays.*
BOOKSELLERS Rama Krishna & Son, Oxford Book and Stationery Co., Punjab Religious Book Society, Utter Chand Kapur
NEWSPAPERS · *Civil and Military Gazette, Tribune*
CHURCHES. *Cathedral, R C Cathedral, Presbyterian, Wesleyan, Scotch*
MISSIONS. *C.M.S*, St John's Divinity School, Zenana Mission, and Trinity Church, *American Presbyterian*, Forman College and Church, *R.C. Cathedral*
MUSEUMS *Central, Fort*
UNIVERSITY

LAKKANDI, 574, temples

LAKSAM, 485 (R.), D B

LALA MUSA, 363 (R.), D B, R H.

LALGOLA GHAT, 469, D B

LALITPUR, 169, D B K, R H

LALMANIRHAT, 487 (R.).

LANDI KOTAL, 381

LANSDOWNE, 416, D B K, R H.

LARKANA, 405 D B
BANK *Imperial*

LASALGAON, 41, for Chandor hill fort, 14 m

LASHIO, 660, D B (4), R H
AERODROME

LASWARI, 325, battle

LAURIYA NANDANGARH, 464, Asoka lat

LEH (Ladakh), 389

LETPADAN, 708 (R.).

LHAKSAR, 412 (R.)

LIMBDI, 229

LINGAMPALLI, 548 R H, cave temples, for Patancheru, 5 m N.W

LODHRAN, 396 (R.)

*LONAVLA, 513 (R.), for Karli Cave
HOTELS *Lonavla, Woodlands, Hamilton*

LONDA, 542 (R.).

LORALAI, 411, D B K

*LUCKNOW, 438-460 (R.).
HOTELS In Abbott Road, *Royal*, in Clyde Road, *Carlton, Burlington, Hilton's, Civil and Military*, and *Indian*
RESTAURANT *Hakman's Criterion.*
CLUBS *United Service*, in the Chatar Manzil Palace, *Mohammed Bagh*, Cantonments
BANKS *Imperial, Allahabad: Central.*
BOOKSELLERS Lucknow Publishing House, Upper India Publishing House
CHURCHES *Christ Church; R C Church; American M E Church.*
HOSPITALS: *King*

George's Medical Coll. and Hosp., and others

MISSIONS: *C.M.S.* (at Zahur Bakhsh), Church of Epiphany and Schools, *Methodist Episcopal of U.S.A.*, *R.C. Churches*

MUSEUM (Ajaib Ghar) is closed at 3.30 and on Fridays Residency

NEWSPAPER *Pioneer* (1866), formerly published Allahabad

Prince of Wales Theatre and Cinema, *Elphinstone Picture Palace.*

LUDHIANA, * 334 (R.), D.B.K., battlefields

BANK: *Imperial*

MISSIONS *American Presbyterian* (18[illegible]), *Medical and Zenana*

LUMDING, 490 (R.), [illegible].

LYALLPUR, [illegible] (R.), D.B.K.

AGRICULTURAL MUSEUM

BANKS *Imperial*, *Allahabad*

M

MADAMPE, 747, Coco-nut Research

MADDUR, 591 (R.), for Cauvery Falls, 30 m., temples

***MADRAS**, 605-616 Central Station (R.), Egmore (R.), R.R. (10)

AERODROME: (Meenambakam) Flying Club

HOTELS: *Spencer*, *Connemara*, *Bosotto*, all in Mount Road *Lloyd's*, Monteith Road, Egmore

AGENTS *Thomas Cook & Son*, 1-35 Mount Road, *Parry & Co*, Beach (Agents for Cox & King), *Binny & Co*, Armenian St. (Agents for Grindlays)

BANKS *Imperial*, Mount Road and Beach, *Chartered, of India, Australia, and China*, Esplanade, *Mercantile, of India*, First Line Beach; *National, of India*, First Line Beach, *Eastern*, Broadway, *Central, of India*, Broadway.

BOOKSELLERS. Higginbothams, Mount Road, Aubbiah Chetty & Co, Madras News Agency, Mahadevan, Rochouse & Sais.

CLUBS. *Madras*, on Mount Road.

The *Adyar Club* admits ladies as well as gentlemen, it is 3 m S of Madras Club; in its grounds the *Madras Boat Club Gymkhana* (Island), *Madras Cricket Club* and grounds, Chepauk Indian: *Cosmopolitan*, *Union*, Mount Road, *United*, George Town, *Wellingdon*, Egmore (Indian and European ladies), *Royal Madras Yacht*

CHURCHES *Anglican St George's Cathedral*, *Christ Church*, Mount Road *St Mary's*, Fort St George, *St Matthias*, Vepery, *Holy Cross*, Perambur, *Emmanuel*, George Town, *St Mark's*, N George Town, *St Thomas*, San Thomé, *Tucker's Ch.*, Broadway, *Trinity Chapel*, Park Town. Church of Scotland *St Andrew's*, Egmore R.C. *Cathedrals*, Armenian St and San Thomé, *St Joseph's*, Vepery, *St Thomas*, Royapuram

UNIVERSITY

RESTAURANTS AND CONFECTIONERS *Bosotto*, Mount Road, *Harrisson & Co*, Broadway, Georgetown

CONSULS *U.S.A.*, Mercantile Bank Bldg, First Line Beach *France and Belgium*, c/o Walker & Co, Beach Other nations also represented

LIBRARIES *Connemara Public*, Egmore, *Literary Society*, College Road, Nungambakkum, *Theosophical Society*, Adyar

MARKETS *Moore Central* near Central rly sta, *Smithfield*

MISSIONS The *S.P.G.* (Mission House in Rundall's Road, Vepery) serve the following Churches — St Thomé, St Paul's (Vepery), and St John's (Egmore), and have charge of a Theological College in Sullivan's Gardens; also of Schools and Orphanages *C.M.S.* (at Egmore), Holy Trinity Church, Divinity School, and Harris High School; R.C. Church, Armenian St *Church of Scotland*, *Lutheran*, *Wesleyan*, and *American Baptist.*

MUSEUMS. *Government*, *Victoria Technical Institute*

NEWSPAPERS Daily Papers, *The Mail*, *The Indian Express*, *The Hindu*

STEAMSHIP AGENCIES *P & O* and *British India S.N. Co.*, Binny Co, Armenian St

Asiatic S.N. Co, Best & Co, Beach For Coast Ports, Calcutta, Burma, Andamans, etc

Clan Line, *Gordon*, *Woodroffe & Co*, Beach.

Ellerman's City and Hall Lines, Best & Co, Beach

Bibby Line (Burma and Liverpool, *via* Colombo), Gillanders Arbuthnot & Co, Beach

MADURA, 661 666 (R.), **R.R.** (11), D.B.K., temples, Jain caves

BANK *Imperial*

CLUB *Madura*, 2½ m from the rly sta

MAGWE, 706, 2 R.H.

***MAHABALESHWAR**, 534

HOTELS *Frederick's*, *Hotel Russe*, 5 others

CLUB with bedrooms attached

GOVERNMENT MAIL MOTOR CONTRACTORS *Chinoy & Co*

MOTOR CARS from Poona, in 4½ hrs Tel address for inquiries regarding cars or seats: *Autocar*, *Poona* and *Autocar Mahabaleshwar*

MAHABALIPURAM (Seven Pagodas), 624-627 D.B., Pallava cave temples

MAHABAN, 254 ancient city

MAHASU, 326

HOTEL: *Wildflower Hall*

MAHBUBNAGAR, 580 (R.) D.B.K., R.H.

MAHE (French), 640

MAHENDRAGIRI HILL, 507, temples, pillar

MAHESHWAR, 146; prehistoric site

MAHMUD KOT, 366 (R.); for Indus ferry

MAHOBA, 174, D.B.K., 2 R.H., ancient city

MAHULI, 538, temples

NANDANA, 365 ; old city
NANDER, 85 (R.), D B ; Sikh Gurudwara
NANDIDRUG, 582 ; fortress
HOTEL *Cubbon Bungalow*
NANDYAL, 581 , 2 R H
BANK . *Imperial.*
NANJANGUD, 597 , temple
NARYANGANJ, 483 , D B , jute centre
BANK *Imperial.*
NARNAUL, 226 , battle in 1857
NARORA, 417 , Ganges barrage
NARWAR, 186 , fortress

NASIK ROAD (5 m to Nasik), 37-41 (R.) D B
TRAMWAY to City, as 8
HOTEL
BANK *Imperial*
MISSION C M S at Sharanpur
CLUB . *Royal Western India Golf* , accommodation for temporary members.

NASIRABAD, 159 , D B
NAUSHAHRA, 375 ; D B See Nowshera
NAVSARI, 189 , R H , Parsi Settlement
NEGAPATAM, 636 (R.), R.R. (2) , port
BANK *Imperial*
NEGOMBO, 746 , 2 R H , Dutch Settlements
NELLORE, 511 , D B K , fortress
BANK *Imperial*
NERAL (for Matheran), 512 (R.).
NILGIRI HILLS, 630-635
NIMACH, 152 (R.) ; D B K , for Khor Temples, 15 m
CLUB
NIRA, 533, for Lloyd Dam
NOWGONG (Assam), 489 , D B
NOWGONG (Bundelkhand), 374 ; D B K , R H , 19 m from Harpalpur
NOWSHERA, 375, D B K , R H
HOTEL *The George*
CLUB.
BANK *Imperial*
NUSHKI, 411

***NUWARA ELIYA**, 734
HOTELS . *The Grand , St Andrew's* ; and others Also *Carlton* and other Boarding Houses.
CLUBS . *Hill , United ; Golf*
BANK *National of India*
Golf Course, excellent
NYAUNGU, 703 , R H , for Pagan, old city

O

OLAVAKKOT, 635 , D.B , fort
ONGOLE, 511 (R.) , D B
***OOTACAMUND**, 631-634, (R.), R.R. (3)
HOTELS *Savoy , Cecil*
BOARDING HOUSES *Westward Ho , Fir Grove , Maplecroft , Kingscliffe , Willingdon House , Summer House*
CLUBS . *Ootacamund , Gymkhana , Golf*
BANK . *Imperial*
NURSING HOMES *Ratan Tata , Willingdon , Nilgiris*
SCHOOLS *Lawrence Memorial School , Breeks' Memorial High School , St Hilda's , Nazareth Convent*
NEWSPAPER *South of Indsa Observer*
ORAI, 172 (R.) , D B K , R H
ORCHHA, 173 , fortress
ORISSA, 495
OSMANABAD, 527, Jain and Brahman caves

P

PABBI, 375 , R.H , for Cherat, 23 m
PACHMARHI, 44
HOTEL *Pachmarhi*
Boarding Houses
Tel address of Motor Service, *Mallagents, Pipariya*
PAGAN, 703 ; R.H , old city, pagodas, Museum
PAHUR, 67 , 2 R H ; on Ajanta route.
PAITHAN, 85 , D.B., Andhra capital
PAKOKKU, 703 , on Irawadi river
PAK PATTAN, 393 , D.B. ; for Sulemanka barrage, 10 m
PALAMCOTTA, 667 ; D.B.
MISSIONS : *C.M.S.* Training Institution , Schools ; Sarah Tucker Institution , Tamil Mission Church.
PALAMPET, 559 ; lake, temples
PALAMPUR (Kangra), 342 , D B K , Brahman temples
PALANPUR (Rajputana), 206 (R.) , D B
PALETWA, 714 , R.H. (2) , sport.
PALEZAGHAT, Ganges ferry to Dighaghat
PALGHAT, 635 , D B K
PALITANA, 230, for Satrunjava Mountain , Jain temples
PALNI, 660 , D B K ; temple
PAMBAN, 669, viaduct to Rameswaram Island.
PANCHGANI, 534
HOTELS, boarding houses
PANDHARPUR, 527 , D B , temple
PANDU, 483 (R.) ; Brahmaputra Ferry , Motor Service to Shillong.
PANDUA (Hooghly), 66 , battle, monument
PANDUA (Malda), 472 ; old city
PANIPAT, 320 , D B K , 2 R H , three battles
PANJIM. See Goa
PANYAM, 581 , D B , for Banganapalle
PARACHINAR (Kurram Valley), 373
PARASNATH, 58 , R H. , Jain temples
PARBATIPUR, 474 (R.) . D B
PARTABGARH, 421 (R.) ; D.B K , R H
PATAN (Anhilwara), 206 , ancient capital
PATAN SOMNATH, 240 , R H , ancient temple
PATANCHERU, 548 , D B. ; colossal Jain statues.
PATHANKOT, 340 (R.) , D.B K , R.H. ; fort
PATIALA, 332; D B K , State Guest House.
***PATNA**, 61-64 (R.) ; D.B. ; ancient Pataliputra ; Museum
HOTEL . *Grand Regis*
UNIVERSITY.
MISSIONS : *Baptist , Zenana (Duchess of Teck Hospital) ; R.C. Church.*

BANKS · *Imperial* · *Allahabad*.

NEWSPAPER · *The Indian Nation*; *Hindustan Review*

PATTADAKAL, 572, *via* Badami, 10 m.; Brahman and Jain temples

PEGU, 691 (**R.**), D B (3), pagodas

CLUB.

PENUKONDA, 582, D B, near Anantapur, fort

PERADENIYA, 729 731, R.H, botanical garden.

PERIM, xliv

PERIYAR, 638, 606, lake, scenery

PESHAWAR, 376 (**R.**), D B K

HOTEL *Dean's*

CLUB near the Church

BANKS *Imperial*, *Chartered*; *Lloyds*

AGENTS *Grindlays*

CHURCHES *St John's* (C E), *St Michael's* (R C)

EDWARDES COLLEGE

READING HOSPITAL

NEWSPAPER *Khyber Mail*

MISSIONS See p 376

MUSEUM *Victoria Memorial* (Buddhist)

PEZU, 373, D B K

PHILLAUR, 335 R H, fort

PHULERA, 219 (**R.**),

PILIBHIT, 418 (**R.**), D B K, R.H

PIND DADAN KHAN, 364, D B.

PIPARIYA, 44, D B, for Pachmarhi

PIPRAWA, 465, stupa

PLASSEY, 467; R H, battle monument

PODANUR, 629 (**R.**, **R.R**) (2)

POLLACHI, 630, D B, for Anamalai Hills

POLLIBETTA, 598.

CLUB.

POLLILORE, 622; battle

POLONNARUWA, 758, R.H, ancient city, dagobas

PONDICHERRY (French), 645; D B

HOTELS · *Grand Hôtel de l'Europe*, Rue Suffren, *L'Alsacien*, Rue de Bussy.

British Consul-General

STEAMSHIP AGENTS: *B I S N Co*, Agent, M Gallois Montbrun, Rue d'Orléans

The B I. Steamers from Madras to Singapore call at Pondicherry, but not the steamers to and from Europe.

BANK *Banque d'Indo-Chine* (Madras Agents, National Bank of India, London Agents, National Provincial Bank) Issues notes which are *not* current in British India

PONNANI, 638, Moplahs

PONNERI, 511, for Pulicat, Dutch Settlement, 10 m

***POONA**, 518 526 (**R.**).

HOTELS *Connaught*, *Napier*, *Poona*, *Majestic*

BANK · *Imperial*

CHURCHES *Anglican St Mary's*, *St Paul's*, *Garrison Ch* (Ghorpuri), *All Saints* (Kirkee), R C *St Patrick's Cathedral*, and two churches, *Church of Scotland*

CLUBS *Royal Connaught Boat*, *Ladies' Deccan Gymkhana*, *Parsi Ladies' Golf Club*, good, full course

NEWSPAPERS *Deccan Herald* and *Evening Dispatch*

MISSIONS See p 521

Cowley Wantage Mission, Panch Howds, Poona City

C M S station (Mission House at Cyprus Lodge)

MUSEUMS *Lord Reay*, *Bharata Mandala* (Mahratta)

*PORBANDAR, 243, D B K port ancient city

BANK *Imperial*

PORT SAID, xxxvii

PORT SUDAN, xliii.

PORTO NOVO, 648, battle.

PROME, 706 (**R.**), D B K, R H, ancient city, pagodas

PUDUKOTTAI, 655, D B K, Museum.

***PURI** (Jagannath), 501-505, D.B, C.H., Brahman temples

HOTELS *Bengal Nagpur Ry* · *Beach*, *Ashworth*

GOLF LINKS.

RAGHUNANDAN LIBRARY

PURLI VAIJNATH, 548; temple.

PURNA, 85 (**R.**), for Aundha temple

PURNEA, 472, D.B K

CLUB

BANK · *Imperial*

PURULIA, 142 (**R.**), D B.K

PUSA, 464, botanical research

PUSHKAR, 219; D B sacred lake

PYINMANA, 692 (**R.**, **R.R**) 2 R H

Q

QUETTA, 409 (**R.**); D B K excellent

HOTELS *Stanyon's*, S of Bazar, some distance from Cantonments, *Lourdes'*, *Alexandra*, more central

CLUB *Quetta*

BANKS *Imperial of India* (in Cantonments) *Grindlay's*

CHURCHES *C of E*, *R C*, *Methodist*

MISSIONS *C M S* and *Zenana*

MUSEUM

QUILON, 668 (**R.**) D B K., ancient city

R

RAE BARELI, 421 (**R.**); D B K R H, fort

BANK *Allahabad*.

RAICHUR, 529 (**R.**), D B, fort, for Maski, 65 m S W

RAIPUR, 139 (**R.**), D B

MUSEUM

BANKS *Imperial*, *Allahabad*

RAIWIND, 393 (**R.**).

RAJAGRIHA, 65, ancient capital, Museum

RAJAMUNDRY, 509 (**R**), Godavari barrage

BANK *Imperial*.

RAJKOT, 244, D B.K

MUSEUM *Watson* (Kathiawar)

BANK *Imperial*

RAJMAHAL, 461, D B.K., old capital.

RAJPUR, 415.
Hotels: *Chapman's; Denis Dale, Ellenborough; Imperial, Carlton*
The motor-road from Dehra Dun runs to a point 2 m. from Mussoorie Library

RAJPURA, 332 (R.), D B

RAJSHAHI, 474

RAMBODA, 735, R H, waterfalls

RAMESWARAM, 669, old temple

RAMPUR (Kashmir), 385, D B K

RAMPUR (Rohilkhand), 417
Guest House, Hotel, Library

RAMTEK, 137, D B, fort, temples

RANAGHAT, 466 (R.), D B

***RANCHI**, 143, D B K
Express train (12 hrs) daily from Calcutta (Howrah)
Hotels *Mount Bengal-Nagpur Rly*, opp sta *Grand*, two Boarding Houses
Anglican Cathedral
Club *Ranchi*
Golf Course

RANGIYA, 487 (R.)

***RANGOON**, 684-690 (R), R.R. (11), Zoo
Hotels *Strand*, on Strand Road (rebuilt), *Minto Mansions*, Halpin Road. *Royal*, 4 Merchant St
English Boarding-Houses *Allandale*, Godwin Road, *Croton Lodge*, Ahlon Road, and *Wexford*, Simpson Rd
Restaurants: at above hotels; also the *Silver Grill*, Fytche Square, *Romani's*, corner of Phayre and Merchant Streets, *Social*, Phayre St, *Anderson's*, Sule Pagoda Rd
Clubs *Pegu*, Prome Road Cantonments (residential), *Burma*, Merchant Street, *Rangoon*, Lake Avenue, *Y M C A*, Dalhousie St, *Y W C A*, Brooking St., *Gymkhana*, Halpin Road—a favourite resort in the evenings Military band most evenings; *Boat*, Royal Lakes, *Kokine*, Kokine.
Agents and Bankers *Thos. Cook & Son*, Phayre Street, *A. Scott & Co*, Merchant Street (for *Grindlay & Co*)
Banks *Imperial, of India*, Sule Pagoda Road, *Chartered, of India, Australia, and China, National, of India, Hong-Kong and Shanghai Banking Corporation, China and Southern, Mercantile, of India, International Bg Corpn., Netherlands Trading Society*, Merchant St, *Allahabad, Lloyds*, Phayre Street.
Pasteur Institute
Consuls Most countries are represented by Consuls or Vice-Consuls
Motor Omnibuses The Rangoon Electric Tramway and Supply Co run an excellent service along all the main routes in and around Rangoon
Tramways An electric tramway runs from the Strand Road to the Great Pagoda along China Street and Pagoda Road, another line along Dalhousie Street from Kemmendine to Pazundaung a third line along Strand Road from Lanmadaw to Dunnedaw, and a fourth from Strand Rd to Mangon Rd, near the Royal Lakes
Missions *Anglican, American Baptist, R C, Salvation Army*
Newspapers *Rangoon Gazette* (1861) and the *Rangoon Times* The leading vernacular newspapers are the *Sun, Light of Burma* and *Knowledge*
Steamship Companies *British India S N, Bibby Line, Henderson Line*, Steel Bros & Co, Merchant Street. Passages booked by Thos Cook & Son, Ltd, Phayre Street, A Scott & Co, Merchant St (Agents for Grindlay & Co), and Gillanders, Arbuthnot & Co, Strand Road

RANGPUR, 487; D B
Bank *Imperial*

RANIBENNUR, 584, R H

RANIGANJ, 65, 3 D B K, R.H, coal-fields

RANIKHET, 420, D.B K, R H
Norton's Hotel

RANIPET, 600, D.B.; for Arcot

RATANPUR, 140, D B; fort, for Pali Temple, 13 m

RATLAM, 151 (R.), D B

RATNAGIRI, 29, 540

RATNAPURA, 740, R H, scenery, gems

RAUZA (Khuldabad), 74, D B, 2 R H, tomb of Aurangzib, near Ellora, 2 m

***RAWALPINDI**, 368 (R.), D B K, R H
Hotels *Flashman's, Metropole*
Club *Rawal Pindi*
Agents *Cox & King*, Cantonment
Banks *Imperial, Lloyds, Bank of Northern India*
Missions *American Presbyterian, Scotch Church, R C Church, S P G*
Motors *Govt Motor Mail Service, Kashmir Motor Service* (Radha Kishan & Sons).
Museum (plants)

RAZMAK, 373

RENIGUNTA, 531 (R.)

RETI, 397 (R.), R H (railway)

REWA, 46, D B, 31 m from Satna

REWARI, 225 (R.), D B, fort

ROHILKHAND (Rohillas), 417

ROHRI, 397 (R), R H, near Sukkur, for Aror, 5 m (ancient city)

ROHTAK, 344, D B K, R H.

ROHTAS (on Son R), 55, ancient fort, R H on plateau

ROHTAS (Jhelum), 366, D B K, R H, fortress

ROORKEE, 412, D.B.K, R H, Thomason Engineering College

RUK, 407 (R.), D B

RUMMIN DEI (Nepal), 465, stupa, Asoka lat; birthplace of Buddha

RUPAR, 334, R.H, Sutlej barrage

RUPNATH, 46; Asoka Edict

RUWANWELLA, 739; R H.; fort.

SADRAS, 627, DB, Dutch fort.

SAGAING, 699, DB (3), RH, Irawadi bridge

SAGAR ISLAND, 132, mouth of Hooghly

SAHARANPUR, 331 (R.), DBK, RH; botanical gardens

BANK *Imperial*

CHURCHES *St Thomas'* and *American Presbyterian Mission*

SAHETH MAHETH, 421, *via* Balrampur, ancient Sravasti

SAHIBGANJ, 461 (R), DB

SAIKHOA GHAT, 491 (R.), on Brahmaputra R

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CLUBS, *United Service*, *Gymkhana*

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SEHWAN, 406, DB

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SHAHABAD, 529 (R.).

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CLUB

BANK *Allahabad*

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SHAN STATES, 693, 700

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SHERSHAH, 397 (R.), DB Chenab bridge

SHEVAROY HILLS, 629, scenery

SHIKARPUR (Sind), 407, DB, 2 RH, covered bazar

SHIKOHABAD, 430 (R.), DBK, RH

SHILLONG, 489, DBK

Motor service (6 9 seats) daily to Pandu Ghat, where the Brahmaputra is crossed for rail to Calcutta Only one handbag allowed in passenger cars

BANK *Imperial*

HOTELS *Pinewood*, *Ferndale*

CHURCHES *All Saints* (C of E), *RC*, *Welsh Presbyterian*

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CHURCHES · *Christ* (C of E), *Union* (*Undenominational*) *Scotch*, *RC*

BANKS *Imperial*, *Bank of Upper India*, *Lloyds*, *Mercantile*

AGENTS *Thos Cook & Son*, The Mall, *Grindlays*

NEWSPAPERS, *Simla Times*, *Liddell's Weekly*

CLUBS *Annandale Gymkhana Amateur Dramatic*, *Chelmsford*

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The best camping-grounds are the Munshi Bagh, the Ram Munshi Bagh, and the Nasim Bagh (on the Dal Lake)
The Visitors' Bureau will give information and issues Rules
BANKS · *Imperial, Lloyds*
Cockburn's Agency and the *Kashmir General Agency* undertake the hire of boats and all camp requisites, which should be ordered to be ready on arrival
AGENTS · *Cox & King*
ENGLISH CHURCH OF ALL SAINTS in the Munshi Bagh
MISSIONS · *C M S*, doctors and hospital
GUNSMITHS AND TACKLE-MAKERS in the town
CLUB, with golf-course, tennis-courts and library, annexe at Nagin Bagh
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