



Gul Hayat Institute

GAZETTEER

OF THE

PROVINCE OF SIND

B VOLUME I

KARACHI DISTRICT



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PREFACE.

The materials for the "B" Volumes of the "Sind Gazetteer" were collected by the late Mr. Aitken, though at the time of his retirement in 1907 he had only been able to finish the draft of the Karachi Volume.* It is only fair to his memory that it should be stated that this volume, though now brought up-to-date and in consequence re-written in parts, is almost entirely based upon his draft. In the preparation of the volume the compiler desires to acknowledge the assistance which he has received from the Collector of Karachi, the Chairman of the Port Trust, and the Commissioner's Uncoovenanted Assistant, Mr. G. Birch.

J. W. S.





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CONTENTS.

PAGES

Description of the District—

Position and area. Physical aspects. Hills. Rivers.	
Floods. Climate. Rainfall	1—7

Population—

Census details. Proportion of the sexes. Distribution.	
Migration. Classification by religions. Prominent tribes and families (Numrias, Jekhiss, Karmatis and Jats, first class Jagirdars and chief families of Saiyids) ..	8—12

Agriculture—

Character and soil of each Taluka. Principal crops cultivated in the District	13—17
---	-------

Irrigation—

Short Note	18
--------------------	----

Economic—

Short Note	19
--------------------	----

Communications, Trade and Industries—

Descriptive tables of principal roads. Short Note on local trade and industries	22—23
---	-------

Revenue—

Short Note	24—25
--------------------	-------

Justice—

List of criminal and civil courts in the District, with their jurisdictions. Registration sub-districts. Jails. Description of the Karachi Jail ..	26—27
--	-------

Local and Municipal—

Constitution of District and Talukas Local Boards. Municipalities: Karachi Municipality (constitution, revenue and expenditure, etc.). Other Municipalities (Kotri, Manjhand, Tatta, Keti Bandar). Cantonments (Karachi, Manora)	28—33
--	-------

Education—

Primary Education (Local Board, Municipal, Aided and Indigenous Schools in the District). Anglo-vernacular Middle Schools in Karachi, Kotri and Tatta. English Middle Schools in Karachi, Manora and Kotri. High Schools (Karachi High School, Sind Madrasah, Grammar School, St. Patrick's School, Church Mission High

School, St. Joseph's Convent School). Sind College.	
Normal Schools. Newapapem. Libraries (Frero Hall,	
Native General, Max Denso Hall)	34—45

Health—

Description of Civil Hospital, Karachi, and proposed Eye	
Hospital. Lady Dufferin Hospital and Louise Lawrence	
Institute. N.-W. Railway Hospital at Kotri. Govern-	
ment Dispensaries in Karachi. Richmond Crawford	
Veterinary Dispensary	46—49

Administration—

List of Sub-divisions, Talukas and Mahals, with area, popu-	
lation and average revenue	50—52

Places of interest—

Bhamber, Dharaaja, Ghoro, Jam, Tamachi-ji-Mari,	
Jerruck (Buddhist ruins and graves of Robert Hussey	
and the Rev. C. Huntingdon). Jhimpir (tomb and temple,	
settlement of Khojas, Aga Khan). Jhok (shrine of Inayat-	
ulla). Karachi (history, description, Mansors, Kiamari,	
Seamen's Rest, Napier Obelisk, Merewether Clock Tower,	
Business quarter, Bandar Road and buildings, Civil	
Lines, Cantonment, Tramways, Environs, Water Works,	
Government House, Frero Hall and Queen's and King's	
Statues, Max Denso Hall, Khalikdina Hall, Volunteer	
Halls, Goa-Portuguese Hall, Sind Club, Karachi Gym-	
khana, other Clubs, etc., Masonic Hall, Y. M. C. A., Holy	
Trinity Church, Widows' Home, Scotch Church, Method-	
ist Church, Roman Catholic Church, Markets, Victoria	
Museum, Gardens, Cemeteries, and Port), Keti Bandar.	
Kotri. Kotri Allahrakho Shah. Ladian. Lahoribandar	
and Dharaaja. Laki and its hot springs. Manghand.	
Maurypar. Mirpur Bathoro. Mirpur Sakro and tomb of	
Sheikh Abu Turab at Gujo. Megger Peer and Barasti	
tombs. Mughulbhin and tombs. Pir Patho. Rani-ka-kot.	
Rahri. Shahbandar. Sirganda or Sundo Bandar.	
Sujawal. Tatta (history and description, grave of	
Edward Cooke). Tomba on the Makli Hills. Jama Masjid.	
Dabgar Masjid. Samui. Kalan Kot. Thano Bala	
Khan	53—119

TABLES.

	PAGES
I.—Area and Population	121
II-A.—Rainfall by months at Karachi	122—23
II-B.—Rainfall by Talukas and Mahals	122—23
III.—Temperature	124
IV.—Population of Towns	125
V.—Religion and Education	126
VI.—Caste, Tribe or Race	127
VII.—Distribution of Land and Crops	128
VIII.—Domestic Animals and Agricultural Stock	129
IX.—Sources of Water Supply	129
X.—Irrigation Works	130—31
XI.—Takavi Advances and Collections	132
XII.—Prices and Wages	132
XIII.—Famine	133
XIV.—Forest Statistics	133
XV.—Previous and Current Settlements	134—35
XVI.—Criminal Justice	136
XVII.—Work of the Criminal Courts	136
XVIII.—Civil Justice	137
XIX.—Registration	137
XX.—Distribution of Police	138
XXI.—Jails	139
XXII-A.—Revenue Details	140
XXII-B.—Revenue Details by Talukas	141
XXII.—Land Revenue	142—43
XXIV.—Excise	144—45
XXV.—Stamps	146
XXVI-A.—Income Tax	147
XXVI-B.—Income Tax: Classification	147
XXVII-A.—District Local Board	148—49
XXVII-B.—Revenue and Expenditure of each Local Board	150—51
XXVIII.—Municipalities	152—53
XXIX-A.—Education: Proportion of Literates	154
XXIX-B.—Education: Number of Institutions and Scholars	155 to 159
XXIX-C.—Education: Public Institutions and Scholars in 1915-16	160
XXIX-D.—Education: Expenditure on Public Instruction	160
XXX-A.—Vital Statistics	161
XXX-B.—Vital Statistics for 1915	162
XXXI.—Hospitals and Dispensaries	163 to 167
XXXII.—Vaccination	168
XXXIII.—Loss from and Destruction of Wild Animals and Snakes	169
Index	170 to 173



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DESCRIPTION.

Tables II-A, II-B and III.

CHAPTER I OF "A" VOLUME.

The Karachi District, named from its chief town, lies
Position and Area. between $23^{\circ} 35'$ and $26^{\circ} 22'$ north
latitude and between $66^{\circ} 42'$ and $68^{\circ} 48'$

east longitude and occupies the south-west corner of the Province of Sind. It has an area of 11,971 square miles. From its most westerly point, Cape Monze, or Ras Muari, its boundary, defined by the Habb river, beyond which is the Las Beyla State, runs north-east, then, gradually turning, points at last due north where it meets the Khirthar range of hills, which separate it from the Sehwan Taluka of the Larkana District. That district here penetrates the Karachi District, dividing it into two prongs and forming its northern boundary. The point of the eastern prong touches the Indus, which thence becomes the boundary of the Karachi District, running south-east and south and separating it from the Hyderabad District as far as Jerruck (Jhirak), where it passes beyond the river, being bounded first by the Guni and Badin Talukas of the Hyderabad District, then by the Rann of Cutch and the broad Khorri creek. From this, its most southerly point, the limits of the district run north-west to Cape Monze again, with the sea for their boundary all the way.

In its physical aspects the district includes samples of
Physical Aspects. all the features of nature to be found
in Sind. Kohistan in the north, where

the Kirthar range penetrates the district for thirty miles, flanked and followed up by minor ranges, has been described as "a succession of broad valleys lying between ranges of hills running generally north and south. . . . The valleys are more or less level and fairly covered with grass or brushwood: the hills are bare and mostly composed of limestone; looking at them they give little idea of containing any vegetation, but large flocks of sheep subsist on them and select these bare hills as grazing grounds in preference to the more grassy plains." Southwards towards Karachi the country degenerates into sandy wastes, uncultivated

and almost devoid of vegetation, but much broken up by short ranges of low, stony hills, and intersected by the nais, or torrent beds, which carry the drainage of the Kohistan to the Indus. The southern limit of this tract may be defined by a straight line drawn from Karachi to Tatta. South of this lies the Delta, a triangle with Tatta for its apex and the sea coast for its base. Tatta is, strictly speaking, well out of the Delta now, for the old branch of the Indus which ran past it into the Gharo creek silted up about 130 years ago and is only represented by the Kalri canal now. Another branch of the river, more recently extinct, has become the Baghar canal. The apex of the Delta now is at the bifurcation of the Ochito and the Haidari (Mutni), a few miles below Kotri Allahrakhio Shah in the Ghorabari Taluka. Between this point and the sea the country is cut up by a network of branches of the river, passing into creeks and connected by cross-channels, and the aspect which it presents varies with the distance from the sea. Along the coast a strip of 5 or 6 miles in breadth, which is so liable to submergence at high tides that it is always moist, supports a growth of small coarse grass and rushes, which in turn support innumerable buffaloes, so that this tract presents a more lively and populous scene than is met with further inland. To the west, as far as Karachi, large tracts of wind-blown sand-hills present a sample, on a small scale, of the desert of Thar and Parkar. Where the influence of fresh water begins to predominate over the salt, grass and mangrove swamps and sand give place to tamarisk and rice fields. In the south-eastern quarter of the Delta, however, there is a wide expanse of absolute salt waste, embracing a large part of the Shahbandar and Jati Talukas, which is almost uninhabitable for man or beast. In this, between the Sir and Khorri creeks, lie the great Sirganda salt deposits, many square miles of solid salt. The upper portions of these talukas with Ghorabari, Mirpur Sakro, Sujawal and Mirpur Bathoro consist of fertile rice country, with tamarisk and khabar in all waste places, and diversified by groves of babul, wide dhandas and perennial marshes.

The hills of Sind, with few and unimportant exceptions, lie to the west of the Indus Valley, and the Karachi District has a fair share of them. The Khirthar range, 150 miles in length

and rising in one peak to a height of of 6,878 feet above the sea, forms the boundary of Sind from the extreme north-west point of the Upper Sind Frontier to the junction of the Larkana with the Karachi District, after which point, turning a little eastward, it constitutes for more than 20 miles the boundary of the two and terminates near the Baran river at about $25^{\circ} 43'$ north latitude. This is the "Hala" range of English maps and old writers.* About 30 miles of it belong to the Karachi District. Its general height further north is between 4,000 and 5,000 feet, but it falls very much towards its southern extremity and even isolated peaks seldom rise above 3,500 feet. The next most important range has been named by us the Laki because it first attracts attention near the town of that name in the Manjhand Mahal, a little to the north-west of which it commences. It is not the custom of the country to give names to ranges but to peaks and localities; so the local names of this range are numerous. The two hills between which the Baran cuts through the chain are Surjano and Sambok; north of the latter is Ehri, then Narero, then Hotiano. Running first due south, the Laki range divides Kohistan from Kotri Taluka and then, turning a little to the west near Thano Bula Khan, from Tatta Taluka. The total length of this range is about 80 miles and it attains an elevation of 1,640 feet near its northern extremity. To the south and west of these two ranges there is a series of gradually decreasing limestone hills, all running more or less north and south. One such, the Kambu range, about 15 miles in length and attaining in the middle to 2,340 feet, seems to continue the Khirthar range beyond the Baran river, running due south. West of this is the Dumber range, about 15 miles in length. West of this again, where the Habb river joins the Sind Frontier, the much higher Bedur range, which forms the eastern watershed of that river, sends a spur into Sind. Another well marked line of hills runs east of the river from Mangho Pir to Cape Monze, and eastward of this the country round about Karachi is for the most part broken up into small ranges, or ridges, individually insignificant. A large part of the Kotri Taluka and the Manjhand Mahal is also hilly and a hilly tract runs southward from Kotri to Jerruck and

* The name Khirthar appears to have been given to this range by the Geological Survey Department. It is applied locally to the southern extremity of it.

Tatta. The Makli hills, close by Tatta, are a rocky elevation, 18 miles in length by 4 in breadth, well known on account of the tombs which have been erected upon them.

The rivers of Sind, with the great exception of the Indus which is described in the "A" Volume, are ordinarily dry; but very little rain

Rivers.

suffices to flood them from bank to bank, and the impediment which they may then offer to all traffic and military movements has given them importance. They are carefully noted in all the early reports of routes. They gain another claim to consideration from the fact that, though there may be no water in their beds, there is often a good deal under them, so that a broad tract of fields and gardens marks their course in many places. The Habb, which is said to take its origin in the Baluchistan hills, not far from Kalat, joins the Sind frontier, where it is crossed by the Kandahar road and defines it for the final 70 miles of its course, and falls into the sea on the north-western side of Cape Monze. This may indeed be called a permanent stream, for, though it does not flow above ground continuously, it is never without water in disconnected pools of such depth and amplitude that they harbour the mahseer and other smaller fish. After heavy rain a very large body of water comes down this stream. Between fifty and sixty years ago an attempt to use this river for irrigational purposes was made by Khan Bahadur Murad Khan to whom the British Government has granted 33,719 acres of land near its banks. At a cost of three lakhs of rupees he constructed a dam 800 feet in length and 15 in height, but the work was swept away by an unusually heavy flood. Further schemes on a more extensive scale were only arrested by his death.

The next most important river in the district is the Baran, which rises in the Khirthar range, rounds its southern extremity, then flows southwards again to near Thano Bula Khan, where it turns eastward, cuts its way through the Laki hills and finally falls into the Indus four miles south of Kotri, which more than once has come nigh being wiped out of existence by it. Deep drains and strong dams seemed to have removed this danger. The scenery where this torrent has cloven a passage through the hills is very striking. Its total length is about 90 miles. The Malir, a stream of less

size, drains the country north-east of Karachi for a distance of 60 miles and falls into Ghizri Bandar. The course of the Lyari is round the town of Karachi, and its waters go into the harbour. Its rise after rain is very sudden. Elsewhere, especially in the north, there are many similar channels which carry rain water from the hills to the Indus, or diffuse it on the low grounds and make cultivation possible. The most important of these is the Sann, which often pours a great volume of water into the Indus.

Notwithstanding all that has been accomplished in restraining the annual overflow of the Indus by protective bunds, it is not probable that the lowlands of the Delta will ever be safe from occasional destructive floods. Heavy rain also brings down torrents from the hill country in a surprisingly short time, which the water-courses are quite inadequate to carry off safely. In the past such floods have been frequent and sometimes disastrous, as in 1882, when the inundation surpassed all previous records and canals were breached and overtopped; and in 1892, when heavy rain, combined with floods from the hills, covered the face of the country with water, breaking the canals and almost totally destroying the kharif crops in the Jhirak and Shah Bandar Divisions and causing widespread distress. In 1895 the river rose unusually early, standing at 17 feet on the Kotri gauge on June 26th. On August 17th it reached its then record of 22·7½ inches. The embankments of the Baghar and Kalri canals and most of the bunds on either side of the river were breached, and the consequent floods destroyed the entire kharif crop. Finally in 1914 the gauge reading on August 11th reached the highest point ever recorded, i.e., 23·8 inches. In this year the bunds of the Shalibandar Division stood, but that in Ghorabari Taluka burst, and an enormous area of that taluka was flooded, there being a great destruction of property as well as of the crops. The town of Kotri also was only with difficulty saved from submersion.

The climate of Karachi is the best in Sind and one of the best anywhere in the plains of India since the fierce heat of summer is tempered by a breeze from the sea, which, however, is not so moisture-laden and depressing as it is on the Bombay coast.

Generally the sea breeze begins to blow fitfully in March and settles down in April, after which a strong and steady wind from W.-S.-W. night and day is the rule till October. While this lasts the thermometer rarely rises above 93° or falls below 75° , while the humidity of the air ranges from 75° to 85° . But about May and again in October, or earlier, disturbances are liable to occur, the wind suddenly shifting: then the thermometer rises to over 100° while humidity falls by from 20° to 50° . These hot, dry blasts rarely last as long as a week. In November the land breeze sets in and for four months the prevailing direction is E.-N.-E., the temperature gradually sinking until it may range for days together between 60° and 40° , which is the lowest officially registered, though ice has been found in the public gardens at Karachi and precious plants have been severely frost-bitten. Humidity is very variable during the cold season, but the air is never dry with the dryness of Northern India. As far as can be judged from the materials available, the greatest difference between the dry-bulb and wet-bulb thermometers occurs in October, the least in April. Details of temperature for 17 years are given in Table III. The highest temperature recorded was 116° in May 1901, which was quite exceptional; the lowest 40° in January of several years. In the last seven years the thermometer never reached 100° . The greatest range of temperature in one month was 43° in January 1902. These figures are for Karachi and may be taken as approximately applicable to all the coast talukas. Towards Tatta and Kotri the average maximum is higher, the thermometer rising commonly above 100° from April to October inclusive; and the average minimum lower, 32° being registered occasionally. With respect to the sensations of the inhabitants the principal climatic difference is perhaps this, that at Kotri the westerly winds of the hot season come from the Kohistan and not from the sea: consequently the heat is a dry heat. In winter, with the northerly winds blowing from the Indus Valley, there is not the same difference. Information about the climatic conditions of the Kohistan is not available, Thano Bula Khan being the only station at which even the rainfall is registered. The higher hills might afford pleasant sanatoria, but for the insuperable obstacle that there is no water on them.

The rainfall of the Karachi District varies extraordinarily from year to year, being dependent on what may be called accidental causes. The regular monsoon winds bring no rain to arid plains which receive them into an atmosphere hotter and drier than themselves, but when some cyclonic disturbance causes the wind to veer round to an unusual direction, rain frequently follows. During the last twenty years the annual fall at Karachi itself has fluctuated between a few cents and nearly 20 inches. In 1851 a fall of 22·19 was reported between 5th July and 3rd August. From Table II-A it will be seen that August is the month in which most rain falls, then July, then September; but there may be none in these three months. It is very rare for the first three months of the year to be without rain, though the amounts may be small. Thus there are normally two periods of rain, with two dry intervals, for October and November are practically rainless, and April and May nearly so. The distribution of rain in the district appears also to be subject to no law. Table II-B shows that the normal mean ranges from 0·84 at Manjhand to 9·18 at Tatta or about 4 inches; but in 1909 when Manjhand had 1·37, Tatta registered 6·59. Upon the whole, the average is lowest in the region lying along the right bank of the Indus and highest on the coast, but the difference is small. The highest rainfall on record was 41·22 at Shahbandar in 1913. In the hill country of Kohistan there is only one registering station and there the average is comparatively high—8·54.

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POPULATION.

Tables I, IV, V and VI.

CHAPTER IV OF "A" VOLUME.

The figures given in Table I are those of the census of 1911. Of the total population of

Census Details. 521,721, Mussalmans made up 396,334 or about 76 per cent, and Hindus 111,521 or about 21 per cent; of the remainder, 9,013 were Christians and the rest Jews, Parsis, etc.

A kind of census was carried out in 1854, but the results are of no value. There have since been four prior to that of 1911, from which, after making allowance for the Sehwan, Johi and Dadu Talukas, which were transferred from Karachi to Larkana District in 1901, we get the following figures for the district as now constituted:—

1872	..	324,921
1881	..	401,046
1891	..	411,004
1901	..	446,513

From these figures it appears that the rate of increase has been 16 per cent for the nine years ending 1881, 9 and 8 per cent for the next two decades and 9 per cent for the decade ending in 1911.

The numerical relations of the sexes is shown in the following table:—

Proportion of females per 1,000 males in			
Total population.	Home-born population.	Mussalmans.	Hindus.
773	851	810	681

The disproportion of females is greater than it was in 1901, and is to some extent explained by comparing the figures in the different columns. There are fewer females among the Hindus, many of whom keep their families in Hyderabad or elsewhere, than among Mussalmans, and far fewer proportionally in the total than in the home-born population, showing that immigrants without families are

responsible for much of the disparity. In the town of Karachi with its large foreign elements, this disparity is very striking. The number of females in the city and cantonment in 1911 was only 61,670 as against 90,233 males. But after all has been said, the paucity of females in Sind remains unexplained.

The density of the population works out to 44 per square mile for the whole district or 32 per square mile if the town of Karachi be excluded. The most populous rural tract is the Delta, especially the talukas of Mirpur Bathoro and Sujawal, which show 145 and 129 to the square mile respectively; and the least is, of course, the hill country: the Kohistan Mahal shows only 10.

The proportion of the population concentrated in towns was 34 per cent in 1911 as against 31 in 1901. The growth of the town of Karachi fully explains the increase. The rate at which it has grown during the last 39 years is shown in the margin. Excluding the cantonment, the population as ascertained in the census of 1911 was 140,511, which for an area of 66 square miles gives 2,068 per mile.

The proportion of residents whose home is not in the district is very large. In 1881 it was 18 per cent of the whole, in 1891 it sank to 16 per cent, but in 1901 it rose again to 23 per cent, and in 1911 it was 22 per cent. The countries or districts from which most of the immigrants had come in the last mentioned year are shown in the margin. The largest number came from Cutch, Kathiawar and Baluchistan, and the majority of these were labourers on the rice fields in the coast talukas and also at Karachi. Hyderabad furnished the next largest contingent, which would consist of men in Government service, or in business.

Census.	Population.	Rate of Increase.
		Per cent.
1872 ..	54,753	..
1881 ..	73,560	29
1891 ..	105,199	43
1901 ..	116,663	10
1911 ..	151,903	29

Migration.	
Cutch ..	25,217
Kathiawar ..	15,963
Baluchistan ..	14,812
Hyderabad ..	12,205
Punjab ..	7,867
Ratnagiri ..	5,536
United Provinces, Agra and Oudh ..	4,016
Rajputana ..	3,721
Lachana ..	2,610
Serat ..	2,334
North-West Frontier Province ..	2,159
Satara ..	1,826
Gon ..	1,765
Bukhar ..	1,654
Bombay ..	1,621
Afghanistan ..	1,444
Ahmedabad ..	1,110
Poona ..	1,033
Others ..	10,393

Total .. 116,401

The population, classified according to their religions, consisted in 1911 of 398,334 Mussalmans, 111,521 Hindus, 9,013 Christians, 2,202 Zoroastrians, 650 Jains and 278 "others." The number of Christians is larger than anywhere else in Sind owing to the British troops stationed at Karachi and the number of Goanese. These were attracted by the prospect of Government employment immediately after the British occupation and have remained.

Prominent Tribes and Families.

The chiefs of the following tribes reside in the district :—

Numria, Jokhia, Karmati, Jat.

The Numrias, Lumrias or Naumardis (see "A" Volume, page 178), classified among Samas in Table VI, constitute a large part of the population of Las Bela and held most of the Kohistan at the time of British conquest. Their present chief is Malk Sobdar Khan walad Malk Sardar Khan, a First Class Jagirdar (see "A" Volume, Chapter IX, Alienations). He resides at Kotri. Another First Class Jagirdar of the same tribe, Malk Dodo Khan walad Malk Salar Khan, resides at Thano Bala Khan.

The Jokhias, also included in Samas (see "A" Volume, page 174), infested the Delta two centuries ago, robbing merchants, and dominated the country about Karachi under the Mirs, enjoying lucrative privileges in return for the duty of furnishing a contingent of fighting men when required. The Jam of the Jokhias, Jam Murad Alikhan, a First Class Jagirdar and an Honorary Magistrate, resides at Malir.

The Karmatis are a Baluch tribe, deriving their name, it is said, from Karmat in Makran, where they were settled for some time before they came into Sind. They penetrated to Mirpur Sakro where their chief obtained a jagir on the condition that he should muster his tribe for the defence of Tatta when required. The present chief is Jam Punhu walad Khairo Khan. Other First Class Jagirdars of this tribe in the same taluka are Ali Muhammed walad Ibrahim Khan, Ghulam Muhammad walad Khudabakhsh, Jaffar Muhammad walad Alibakhsh, Allah Bindo walad Jamal Khan and Jamal Khan walad Mir Ali. In the beginning of 1843 these three tribes gathered together under orders from the Mirs of Hyderabad to attack the British

camp at Karachi, but the news of the battle of Miani dispersed them.

The Jats (see "A" Volume, page 174) are found all over Sind, but those in the south acknowledge as their chief a Malk who held lands in the Jati Taluka (which perhaps took its name from them) under title deeds from the Emperors of Delhi. The present representative is Malk Muhammad Sidiq walad Malk Ghulam Hussein, First Class Jagirdar.

Besides these chiefs there are the following First Class Jagirdars of other tribes in the district:—

Mir Ali Muhammad Khan Ahmad Ali Khan and Mir Ghulam Haidar Khan Jan Muhammad Khan of the Khanani Talpur family are First Class Jagirdars in Ghorabari Taluka, though they reside at Digri in the Thar and Parkar District and Husri in the Hyderabad District respectively. Rashid Khan walad Gawhar Khan of the Mari (Baluch) tribe is a First Class Jagirdar in the Manjhand Mahal, but resides at Berani in the Sinjhora Taluka of the Nawabshah District.

Two places in the district, Tatta and Laki, are especially associated with those families of Saiyids who immigrated into Sind centuries ago and continued to exercise so potent an influence in the affairs of the country down to the time of British rule. They were feared and favoured and in many cases endowed by the rulers of each successive dynasty. In Tatta they founded many colleges for the study of Arabic learning, and it became what might be called one of the Universities of Sind, Bukkur being the other. Like the religious orders in Europe in the middle ages they did not confine themselves to religion and learning, but acquired great political power and used it, not always in the interests of peace. During the government of Sir Charles Napier their claim to the continuance of the allowances which they had been accustomed to receive from the Talpurs was refused, the Government of India considering that "the allowances were not granted for the maintenance of any mosque or religious establishment of any kind, but were given as a daily allowance for the support of Saiyids and other persons reputed holy," and that they were not "of that description which it could at any time have been held binding on the British Government to continue." Sir Bartle Frere revived the

question, however, and proposed, with the view of turning the Saiyids from a life of religious idleness to the pursuit of agriculture, that they should be granted so much land at half the usual assessment as would amount to a remission of Rs. 6,000 a year. The Government of India assented, but the measure failed owing to the disinclination and unfitness of the Saiyids for agricultural pursuits. Finally the Government of India sanctioned an annual money payment of Rs. 6,000 to the whole body, leaving them to make their own arrangements for its distribution, and this arrangement still continues in force. The Government of India desired that an endeavour should be made to buy up the interests of the recipients by a ready-money payment, but they showed no desire to accept such an offer. The principal families of Tatta Saiyids are the following:—

Shukr Illahi Shirazi. These are Husaini Saiyids and Shias. They state that their progenitor, Saiyid Shukrullah, came to Sind with Shah Beg Arghun (A. D. 1521) and was appointed kazi of Tatta. The historian Alisher of Tatta, author of the "*Tuhfat-ul-kiram*," was of this family.

Mirki, also Husaini and Shia, descended from Saiyid Muhammadiad Mirak, who is said to have come in the train of Shah Beg Arghun and settled at Tatta. He is reputed to have amassed great wealth, but his descendants are very poor. Most of them live at Ghorabari and some at Tatta.

Anjvi Shirazi (commonly called Nakvi), also Husaini and Shia. These came to Sind, according to their tradition, during the reign of Jam Salah-ud-din, one of the early Sama kings (in the 15th century) and settled in Tatta, where they reside still, above 50 in number. They have many murids (disciples).

Mazandrani Lodhi, also Husaini and Shia, descended from Saiyid Badrudin, who is said to have come to Tatta in 967 A. H. (=1559 A. D.). They are few in number and live at Tatta.

The Lakiari Saiyids, so called because they first settled at Laki, where most of them are still to be found, suppose that they came to Sind in the ninth century. They live also at Amri, Manjhand and other places in Manjhand Mahal. The mujawar of the shrine of Lal Shahbaz at Sehwan belongs to this family and is considered the head of it.

AGRICULTURE.

Tables VII and VIII.

CHAPTER V OF "A" VOLUME.

The increase in extent of area (table VII) is mainly due to the results of survey operations. The "Others" shown under "Not available for cultivation" consist of (1) unculturable lands, comprising hilly tracts, sandy lands and saline tracts; (2) lands set apart for special purposes, viz., for Government and municipal buildings, parade grounds, etc.; (3) lands set apart for public purposes, viz., for burial grounds, roads, railways, musafirhanas; and (4) land eroded by the river Indus.

A large part of this district, including the whole of the Kohistan Mahal of the Kotri Division, is mountainous or hilly. The Tatta Division is also on the northern and western division diversified to some extent by elevated land, but Shahbandar, the southernmost division of the Karachi District, is altogether low and flat and appears an endless plain intersected by numerous creeks and channels. The cultivation is dependent on the Indus, which forms the eastern boundary of the district for so many miles, on several canals taking out of it, and on the hill torrents of the Baran, Mallr and others. The cultivation of the district is increasing owing to constant improvements in the means of irrigation. The nature of the soil and cultivation in each taluka is briefly as follows:—

Tatta Division consists of the talukas of Tatta, Mirpur Sakro, Ghorabari and Karachi.

Tatta.—Its alluvial portion consists of a narrow irregular tract bordering on the Indus. The northern half is much interrupted by hills, whilst in the south a range known as the Makli hills skirts the western side of the taluka to the boundary of Ghorabari. It is watered by the Kalri, Baghar and other canals. About 80 per cent of the cultivation is by flow.

Mirpur Sakro.—About half of the taluka is unfit for habitation and has not been divided into dehs. The inhabited portion lies to the east. The western half consists mostly of kalar land, while towards the sea tidal creeks

break the coast line and, overflowing the land, form extensive mangrove swamps. The taluka is watered by the Baghar and other Government canals, but the water supply is only fair. About three-quarters of the cultivation is by flow and the rest by lift.

Ghorabari inclusive of Keti Mahal.—Through this taluka the waters of the river Indus find their principal outlet to the sea by the Ochito and its mouth and irrigate the land. The soil is all alluvial. In the south, below Keti Bandar, there is a considerable area of bhal lands frequently swamped by the sea, but on which red rice is freely cultivated. The water-supply of the taluka away from the river is poor.

Karachi.—This is for the most part a hilly country which depends on rainfall for cultivation. It is, in fact, more pastoral than agricultural. The milch-cows of this taluka have achieved a world-wide reputation, and their export to foreign countries has been a matter of some concern for many years past. A Government cattle farm about eight miles out of Karachi is now to be established to conserve and improve the breed. The wealth of this taluka lies more in its stock than in its crops.

Kotri Division comprises the Kotri Taluka, Kohistan and Manjhand Mahals.

Kotri consists of two distinct portions, a hilly expanse known as the Band Virah Tapa, forming geographically part of Kohistan and a strip of alluvial soil lying between the hilly portion and the river Indus. The latter is irrigated by the Baghdad, Chhandan, Vachero and other canals. The area of cultivation under flow and lift is about equal.

Kohistan Mahal may be described as a succession of broad valleys lying between ranges of hills running generally north to south. The level both of plains and hills rises as one goes north. The little cultivation is entirely dependent on hill springs and on rain. Keeping sheep and goats is the chief occupation of the inhabitants.

Manjhand Mahal.—Most of this consists of rocky hills and high land unfit for cultivation. It is divided into two parts by the North-Western Railway, which also approximately marks the boundary between lands depending for

cultivation on rainfall and lands irrigated by canals or directly from the river. The irrigated portion is again divided into two by the Sann nai, north of which the water supply is derived directly from the river, while the southern portion contains the Government canals Karo, Shah Panjo and Butho. Nearly half the cultivation is dependent on rain and the amount of flow cultivation is only 3 per cent of the whole.

Shahbandar Division comprises the Shahbandar, Jati, Mirpur Bathoro and Sujawal Talukas.

Shahbandar.—Its soil consists of the usual alluvial loam, but with an admixture of sand. In the extreme south, near the sea, however, where the out-flowing water of the Indus meets the in-coming tides of the sea, a deposit of soil takes place, which consists of a soft slimy mud, locally named blal, on which rice is grown. The most characteristic feature of the soil generally is that, wherever the silt-laden water of the Indus has ceased to flow over it for a year or two, it turns into kalar, and kalar lands again become cultivable when overflowed for two seasons. The chief canals are the Sattah, Khanto, Ghar and Kodario. Almost the whole of the cultivation is by flow, only about 3 per cent being lift.

Jati.—The portion of the taluka near the coast is a maze of tidal creeks, and further inland a saline plain, with no cultivation and little vegetation, scarcely inhabited by man or beast. The country towards the north-east is cultivable waste land, for which at present there is no irrigation available. The principal canals are the Gungro, Saida, Mirza, Sattah and Gungri. Almost the whole of the cultivation is by flow, lift forming a very small proportion.

Sujawal.—The most prominent feature of the country is the great extent of perennial marshes, which fill a chain of depressions running from Wali Shah on the north-westwards to Sujawal and southwards towards the Gungro canal, which now, by new drainage channels, conveys the flood water to the sea below Mughulbhin. For the rest the soil is the usual alluvial loam of Sind, the deposit of the river Indus. Formerly the taluka was subjected to destructive floods from the Indus, but latterly it has been protected by

powerful river embankments. The cultivation is mostly by flow.

Mirpur Bathoro is an alluvial plain well watered by the Pinyari and Mulchand and some minor canals. The level is comparatively high and the taluka is consequently safe from the great floods to which the adjoining depressions of Sujawal are occasionally subjected. The cultivation is mostly by flow.

The various kinds of soil are so called by the people in consideration of the particular crops which can be grown upon them. Thus in practice a 'kalrati' soil is only suitable for rice crops, 'dasar' for juari, bajri and green gram, 'wariasi' for gourds and melons, 'rao' for juari, wheat and green gram. "Shor kalar" is unsuitable for any kind of crop.

The principal crops grown in the district are :—

KHARIF CROPS.

Rice.—Rice is the staple food crop of the district and is cultivated in all parts except Karachi Taluka and Kohistan and Manjhand Mahals. Both white and red rice are grown, but the latter variety is the more common. The usual white varieties are known as ratna and sathra, whilst the red are called motia, ganja and kambru.

Juari.—More than half the cultivation of this crop is done in the Kotri Taluka, some in Karachi, Tatta and Kohistan. Two varieties, white and red, are grown.

Bajri.—Except in the hilly tracts of Kohistan and Manjhand, bajri is grown throughout the district.

Sesame.—The cultivation of sesame is small and generally distributed.

Green gram.—This is chiefly cultivated in Mirpur Sakro, Karachi, Ghorabari, Shahbandar and Sujawal.

RAHI CROPS.

Wheat.—Practically the entire wheat crop is grown along the river Indus in Kotri Taluka. White and red varieties are grown. The crop is principally raised either on kacha and other lands which have been submerged by the spill of the river or of a canal (sailabi) or on lands which

have been given a flooding by wheel irrigation towards the end of the inundation (bosi).


Barley.—Barley is chiefly grown in Tatta, Ghorabari, Mirpur Sakro and Sujawal.

Saria and Jambho.—The cultivation of saria (colza) is chiefly undertaken in Kotri and Mirpur Sakro. Jambho is grown everywhere.

Chickling vetch.—This is principally grown in kacha lands which have been submerged by the spill of the Indus in Kotri, Tatta, Ghorabari and Shahbandar and also on bosi lands.

Vegetables.—The indigenous vegetables in common use are cultivated in all talukas. European vegetables are grown in the gardens of Karachi and Malir, and in the Local Fund gardens at the taluka headquarters.

Fruit trees.—Fruit gardens are found at Malir and Karachi. The best mangoes, guavas, figs and plantains in the district are grown at Malir. Grapes are chiefly grown in Karachi. The date-palm only flourishes at Kotri. Coconut trees are found at Karachi and at Ketu Bandar.



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IRRIGATION.

Tables IX and X.

CHAPTER VI IN "A" VOLUME.

The irrigation system cannot be treated by revenue districts, as these do not correspond with the districts into which Sind is divided by the Irrigation Department. Figures relating to all canals, of which any portion enters the Karachi District, will therefore be found in Table X, and for a full account of these the "A" Volume may be consulted. The extent and methods of cultivation by means of canal water are dealt with under the head "Agriculture."



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ECONOMIC.

Tables XI and XII.

CHAPTER VII OF "A" VOLUME.

Rents, wages, prices, credit and indebtedness have been discussed for the whole province in Chapter VII of "A" Volume and the Karachi district scarcely presents any special feature. There is indeed a remarkable uniformity in the rates of wages in the different districts as shown in Table XII. In Karachi town a coolie can earn perhaps twice what he can anywhere else, but the average is not appreciably affected by that. The price of most grains is lower in Karachi District than elsewhere and all imported articles are naturally cheaper.



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COMMUNICATIONS, TRADE AND INDUSTRIES.

CHAPTER VIII OF "A" VOLUME.

The district was formerly a difficult country to travel in. North of a line drawn from Karachi to Tatta it consisted of rocky hills or waterless wastes; south of that line it was for half the year a waste of water, where the rice was reaped in boats and the wandering Jats voyaged on floats of grass. Natural conditions remain the same, but in the south the inundation has to some extent been brought under restraint and canals have been bridged, while in the north roads have been made and rest-houses multiplied. Above all a railway now traverses the district from Karachi to

Roads.

Laki with stations on an average at every eighth mile. The railway has been treated as a whole in Chapter VIII of the "A" Volume, and so have the postal and telegraph systems. Something remains to be said about the roads. There are three main lines of road starting from Karachi which follow the old trade routes—one to Tatta and on to Lakhpat in Cutch and two to Sehwan for Shikarpur and the north. Of the latter, one passes through Kotri and is best known as the Hyderabad road. It takes the same course as the railway and is therefore very little used. The stages on the roads are exhibited in the following statements:—

Stage.	Distance.	Character of road.	Remarks.
Miles.			
<i>Road from Karachi to Sehwan.</i>			
From Karachi to Supuran ..	10	Good and runs over an extensive plain.	Musafirkhana; well water.
Damb ..	8	Good for the most part.	Do.
Kadeji ..	12	Good, but rocky near Kadeji.	Camping ground; musafirkhana; Water from well.
Trak ..	14	Good	Well water and camping ground.
Damach ..	10	Fairly good	Musafirkhana; well water.
Thano Bala Khan ..	8	Good	Chief town in Kohistan; bungalow; musafirkhana and good water from Baran river.
Bachani ..	8½	Fairly good	Musafirkhana; good spring water all the year.
Khejur ..	12	Generally good	Do.
Pokhran ..	10	Do.	Do.
<i>Road from Karachi to Tatta and Lakhpat.</i>			
From Karachi to Landhi ..	12	Sandy and rather heavy in latter half.	The boundary of the Karachi District lies 8 miles beyond Pokhran. Railway station; staging bungalow; good water.

Stage.	Distance.	Character of road.	Remarks.
	Miles.		
Watoji	15	Level and good	Camping ground and musafir-khana; Local Fund garden and wells.
Gharo	10	Do.	Staging bungalow and good water. The ruins of Bhambor lie 2 miles distant to the south-west.
Gujo	12	Cleared road, heavy and sandy.	Public Works Department bungalow, musafir-khana and camping ground. Good water.
Tatta	10	Cleared road; good	Staging and district bungalows on the Makli hills; camping ground; water not very good.
Sujawal	18	Crosses the Indus by the Saidpur ferry at Meehi's village. Kalas in some portions, sandy in others.	District bungalow; musafir-khana; garden and wells.
Mirzo Laghari	7	Good and shady in places	Public Works Department bungalow and well.
Mughulbhan	15	Good over an extensive plain.	Public Works Department bungalow and musafir-khana; water plentiful.
Onya	20	Do.	Musafir-khana; water from Kacha wells.
Yer	4	Do.	Musafir-khana; water supplied from Onya in case of necessity.
Musafir-khana	18	The latter portion of the road bad when the tide rises.	A stone musafir-khana built at the expense of the Rao of Cutch. Sweet water is brought from Lakhpat.

Note. The Koti creek is crossed here and Lakhpat is reached.

The road from Kotri to Lakhpat takes the following route:—

From Kotri to Petaro.	14	Along the bank of the Indus.	Musafir-khana; Indus water.
Bhakar.	12	Shady	Musafir-khana; Local Fund wells.
Manjharid	15	Good, but not shady	The head-quarters of the mahal. A small district bungalow and a musafir-khana; good water. The railway station is a mile to the west.
Sann	11	Do.	Musafir-khana and Indus water.
Amri	12	Do.	Staging bungalow and musafir-khana; Indus water.
Laki	10	Do.	Bungalow and musafir-khana; Indus water. The Laki hot springs are at Dhara Tirth 2 miles to the north-west.

Five miles further, at Morelak, is the boundary of the district.

The other main roads through the district are :—

(1) Dabheji station to Ghara (7 miles), to Mirpur Sakro (15 miles), to Buhara (8 miles), to Garho (18 miles) and to Ketī Bandar (16 miles).

(2) Jungshahi to Tatta (13 miles metalled), to Pir Patho (13 miles), to Kotri Allahrakhi Shah (12 miles), to Garho (18 miles) and to Ketī Bandar (16 miles).

(3) Kotri to Thano Bula Khan (32 miles).

(4) Sujawal to Mirpur Bathoro (15 miles).

(5) Karachi to Pir Mangho (10 miles) and to the Habb river (7 miles).

With the exception of the roads from Karachi to Pir Mangho and from Jungshahi station to Tatta none of the roads of the district is metalled. Except in municipal towns and cantonments the roads are in charge of the local boards, and up to the present have served their purpose. Hitherto transport has been mainly by camels, and carts have been few. Since the opening of the railway military traffic has practically stopped. With the development of motor transport the metalling of the main roads may become necessary.

In the Delta the traffic is almost entirely by water. Numerous creeks and channels are connected by cross channels, so that small boats can make their way at high water in any direction within a distance of fifteen to twenty miles from the shore.

Traffic between Ketī Bandar and Karachi is mainly by sea, except during the monsoon months.

There are numerous ferries plying across the river Indus. The canals are on the whole well bridged.

The great facilities for transport in every direction which

Trade and Industries. exist now make it almost impossible to give any account of trade by districts. The trade of Karachi is nearly an equivalent term for the trade of Sind and it has therefore been treated in Chapter VIII of the "A" Volume. Further information is given below in the article on the Port of Karachi. Within the district the movement of trade consists chiefly in the

flowing together to Karachi of the rice, wheat, wool, bones, hides and other produce of the country, and the distribution from Karachi, by way of the smaller towns, of piece-goods, sugar, kerosine oil and the miscellaneous manufactured articles from Bombay and Europe which people have learned to require. Among these, ironmongery and chemical dyes may be specially mentioned. The means of transport are road and rail in the northern half of the district and water in the southern. That which takes the former is nowhere registered in a form that can be made use of here, and it is less important. That which takes the latter has two principal gates—Keti Bandar and Sirganda—where it is all registered in the Custom Houses at those places (q. v. under "places of interest"). A good deal of produce, however, finds its way by the Gharo creek to Ghizri Bandar, which is a sub-port of Karachi, and is therefore absorbed in the trade of Karachi. Both Keti Bandar and Sirganda have a certain amount of direct trade with Cutch, Kathiawar and even Zanzibar; but the greater part of their exports first go to Karachi and are eventually included in the foreign or coasting trade of the chief port. The exports of the district, as of the province, always largely exceed the imports and consist almost entirely of raw produce, rice preponderating over all else. There are no arts or manufactures in the district of sufficient importance to deserve mention at all as an element in the trade, though from other points of view some, like the weaving of lungis at Tatta, are interesting. These are described in the general article in the "A" Volume and are mentioned also in connection with places at which they are a speciality. There is, however, one humble industry of the district which should not go altogether unnoticed, because it employs many hands and is also the cause of a local traffic by no means insignificant. This is the manufacture of mats (pankha) from the rank grasses, sar and kanh, that grow on the river banks. These mats, which are used for temporary huts, boat awnings and many other purposes, form a very considerable proportion of the cargoes of the boats that ply among the mouths of the Indus and between them and Karachi.

REVENUE.

Tables XIV, XV XXII-A, XXII-B, XXIII, XXIV, XXV, XXVI-A and XXVI-B.

CHAPTER IX OF "A" VOLUME.

Table XV details the rates of assessment payable under the current settlement in each taluka of the district. The history of the various kinds of settlements that have been in force in the province from time to time have been given in Chapter IX of the "A" Volume. The irrigational settlement is in force in every taluka, except Karachi, and the Manjhand and Kohistan Mahals. The irrigated portions of Karachi Taluka near Malir and Landhi, comprising three tapas, were settled for the first time in 1911-12. The remainder of the taluka is divided into five tapas which have been roughly surveyed. The rates in force in these are 8 annas per acre for unploughed barani, 12 annas for ploughed barani, Re. 1 for flow aided by lift. In the hilly country of Manjhand and Kohistan it is impossible to bring cultivation under any very definite rules as it depends entirely upon rain, and crops are raised whenever there is sufficient moisture in the soil.

The figures of revenue given in Table XXII-A are expanded under different heads in the six succeeding tables. The head "Other Sources," which is intended for miscellaneous sub-heads not deserving of separate notice, includes, in this instance, the imperial customs revenue collected at Karachi, Keti Bandar and Sirgonda, and nearly four-fifths of the whole salt revenue of the province, and therefore amounts to more than the double of all the other heads put together. It also includes the revenue derived from fisheries, but not forest revenue, which is separately shown in Table XIV. Its sources are shown in the article on forests in Chapter II of the "A" Volume. The history and management of the customs and salt revenue are described along with excise, stamps, income tax, etc., in Chapter IX of that volume. The whole of the salt duty credited in this district is collected at the Maurypur Salt-works, a description of which is given below under "Places of Interest." Allusion to these Salt-works has already been made in Chapter IX of the "A" Volume.

The right to fish in the Indus and in the canals and dhands within the District is annually sold by auction. In the case of canals and dhands filled by canals, the right is sold by auction and the proceeds are credited to the Public Works Department.

In the case of the river and of dhands filled by the inundation, the Revenue Department sells the right and receives the proceeds.



Gul Hayat Institute

JUSTICE.

Tables XVI, XVII, XVIII, XIX, XX and XXI.

CHAPTER X IN "A" VOLUME.

In addition to the Court of the Judicial Commissioner of Sind at Karachi, which is also the Criminal and Civil Court of Sessions and District Court for the Karachi District, the following Criminal and Civil Courts exist in the district. The jurisdiction of each is specified :—

Name of Court.	Jurisdiction.
Court of the District Magistrate	The entire district.
" " Port Officer	Kiamari and Manora.
" " City Magistrate	Within Karachi City divided between them.
" " Additional City Magistrate	
" " City Deputy Collector	Cantonments Karachi and Manora.
" " Cantonment Magistrate and Cantonment Court of Small Causes, Karachi	
" " Sub-Divisional Magistrate, Tatta	Tatta Division.
" " " " Shahbandar	Shahbandar Division.
" " " " Kotri	Kotri Division.
" " Resident Magistrate, Sujawal	Shahbandar Division.
" " " " Tatta	Tatta Division.
Nine Courts of Mukhtyarkars and Magistrates, one in each taluka.	Within taluka limits.
Nine Courts of Head Munshis and Magistrates, one in each taluka.	Do.
Court of Mahalkari and Magistrate, Manjhand	Manjhand Mahal.
" " " " Kohistan	Kohistan Mahal.
" " " " Koti Bander	Koti Bander Mahal.
Court of Small Causes, Karachi	The town and taluka of Karachi.
Subordinate Civil Court, Tatta	The whole of the Karachi District with the exception of Karachi Taluka. The Sub-Judge visits Kotri and Sujawal on circuit.

The District Magistrate is by law a first class magistrate.

The Sub-divisional Magistrates, the Resident Magistrates and the Magistrates in Karachi are invariably of the first class, the Mukhtyarkars are either of the first or second class, the Mahalkaris usually of the second class, and the Head Munshis of the third class.

Four benches of Magistrates invested with second class powers also sit in Karachi City.

There are three Special Magistrates in Karachi City and seven Special Magistrates in the district, who sit regularly for the disposal of cases. The powers conferred upon them vary.

In the district ten Registration Sub-districts have been created, with offices at Karachi, Mirpur Bathoro, Tatta, Mirpur Sakro,

Registration.

Kotri, Ketī Bandar, Ladiun, Jati, Ghorabari and Thano Bula Khan. The Registration Sub-districts correspond therefore with two exceptions to the revenue divisions of talukas and mahals. Sujawal and Manjhand have not yet been formed into separate Registration Sub-districts. Deeds relating to property situated in Sujawal are presented to the Sub-Registrar of Mirpur Bathoro, while deeds relating to property in Manjhand Mahal are presented to the Sub-Registrar, Kotri, who for the purpose is required to visit Manjhand for one week every month. At Karachi, Kotri, Tatta and Mirpur Bathoro the work is done by full-time Sub-Registrars; elsewhere it is done by the taluka Head Munshis in addition to their own duties.

There are in the district a district prison at Karachi and eleven third class subsidiary jails,

Jails.

one in each taluka, or mahal, headquarters town, except Karachi. Besides these there are six police lock-ups at certain of the police stations.

The Karachi prison, to which figures in Table XXI relate, was situated in the jail quarter of the town, on the Bandar Road, having been constructed in 1858 at a cost of Rs. 1,12,412 and covering 10½ acres. For many years it proved to be quite inadequate, and in 1906 a spacious new jail was opened on the plain north of the water-works reservoir. It is reached by the road running north-east from the Soldiers' Bazaar. The area within the outer wall, which is 13 feet high, is 10,889 square yards and provides accommodation for 325 males and 17 females. The several barracks, cells and workshops for male prisoners are surrounded by an inner wall 9 feet high. Between the two, in separate enclosures, are female cells, wards for Europeans, juvenile offenders, etc., and a hospital. The male prisoners' barracks are all fitted with cubicles of strong wire-netting. The quarters for the jail staff are all outside of the main wall. The total cost of the building was Rs. 3,57,000.

LOCAL AND MUNICIPAL.

Tables XXVII-A and B and XXVIII.

CHAPTER XI- IN "A" VOLUME.

LOCAL BOARDS.

The District Local Board is composed of 12 nominated and 11 elected members. The former include the Collector who is always appointed President, two Assistant Collectors, one District Deputy Collector, the Huzur Deputy Collector and the Executive Engineer, Karachi Canals. The elected members consist of one member from each of the Taluka Boards, one from the Karachi Municipality and one from the holders of entire alienated villages. The Vice-President is now for the first time a non-official.

There is a Taluka Local Board for each taluka, the number of members depending upon its size. The Assistant Collector or Deputy Collector in charge of the taluka is its President, and non-official Vice-Presidents are now being appointed, as opportunity for doing so presents itself.

The tables give details of the revenue and expenditure of the Boards. Besides the maintenance of roads, which involves keeping in repair some 800 important bridges, the District Board kept up the following important works during the year 1915-16 :—

- 62 wells and tanks.
- 10 travellers' bungalows,
- 60 dharamshalas.
- 103 schools.
- 10 dispensaries.

The Board contributed to the following institutions in 1915-16 :—

	Rs.
Dayaram Jethmal Sind College	1,300
Sind Madressah	1,800
Victoria Museum	600
Zoological Garden	1,000
Lady Dufferin Female Hospital, Karachi	2,250
Karachi Civil Hospital	1,000

	Rs.
Tatta Municipality for maintaining schools and dispensaries	1,960
Manjhand Municipality for maintaining schools and dispensaries	800
Municipal Dispensary, Kotri	600
Municipal Dispensary, Keti Bandar	500
Medical School, Hyderabad	400
New High School, Karachi	600
Louise Lawrence Institute	1,800
Jaffar Fudoo Dispensary	300

The Board keeps up some gardens and maintains the vaccinating establishment of the district.

MUNICIPALITIES.

The progress and the present position of municipal government in Sind are sketched in Chapter XI of the "A" Volume. When Bombay Act VI of 1873 was extended to Sind on 1st October 1878, the Karachi District had Municipal Commissions in 14 towns, 8 of which, having less than 2,000 inhabitants, were excluded by that Act. Of the remaining 6 towns, Karachi having more than 10,000 inhabitants became a "City Municipality," while the following five became "Town Municipalities"—Kotri, Manjhand, Tatta, Mirpur Bathoro and Keti Bandar. The last had been eroded by the river in 1877, but arose again in a new place. In 1878 the Karachi Municipality set the example to Sind of levying a house-tax and was followed by Kotri and Keti Bandar. The elective system was introduced in Karachi and Kotri in 1884. When the enactments of 1873 and 1878 were repealed by Bombay Act III of 1901, which amended and consolidated the whole law relating to municipalities in cities and towns of the Presidency other than the city of Bombay, Karachi continued to be a City Municipality. The Municipality of Mirpur Bathoro was abolished in 1895, but the other four mentioned above remain to this day.

The Karachi Municipal Council in 1915-16 consisted of 42 members, of whom 24 were elected by wards, 2 by the Chamber of Commerce, 2 by the Indian Merchants' Association and 14 were

nominated by the Commissioner in Sind. The President is a non-official. The executive body is a Managing Committee of 9 members, of which the president is Chairman and the Vice-President a member.

The area originally assigned to the Municipality embraced 71.42 square miles of ground and there has since been little change in these limits, except that in 1903 Manora, comprising an area of 2.2 square miles, was declared to be a Cantonment and the municipal boundaries were adjusted accordingly.

The average income of the Municipality since the year 1904-05 has been Rs. 17,55,287 and the expenditure Rs. 16,84,134. Up to 1915 octroi was the main source of the income, accounting for more than one-half of it. In that year a terminal tax was introduced in lieu of it. The total revenue derived from the tax up to March 31st, 1916, was Rs. 2,34,546-13-0 and that for the year 1916-17 Rs. 6,42,787-10-7. The rest of the revenue is derived from water rate, conservancy cess, house-tax, rents, the sale of land, market and slaughter-house fees, tax on animals and vehicles, miscellaneous items and contributions. Government make an annual grant equal to one-half of the municipal expenditure on primary education, and smaller contributions for general and educational purposes are also received from the Local Board.

The principal claims on the revenue, after meeting the cost of general administration and collection of taxes, are conservancy, roads, schools and colleges, drainage, lighting, libraries and museums, hospitals and dispensaries. The Municipality supports 18 primary schools and pays grants to 18 primary and 5 secondary schools. Karachi is the only town in Sind that maintains an agency of its own for the registration of births and deaths. The Registrar is also Superintendent of Vaccination. The municipal debt which stands at Rs. 17,71,350 is being paid off by means of a sinking fund. This debt was incurred on account of water works and drainage, on which the current expenditure is also heavy; but in the case of the water works it is reproductive expenditure, and even the drainage system has been made to yield a certain amount of revenue by its connection with a farm.

The constitution of the other Municipalities in the district is exhibited in the following table :—

Municipality.	Councillors.			Population in 1911.
	Officials.	Non-officials.	Total.	
Kotri	3	9	12	7,256
Manjhand	3	7	10	2,838
Tatta	4	8	12	11,161
Keti Bandar	4	8	12	1,734

Kotri is the only town in the district, except Karachi, which enjoys the privilege of electing a portion of its corporation. Six of the twelve are elected and the remainder nominated by the Commissioner in Sind. In the other three Municipalities the members are all nominated, either by name or in virtue of their offices. In Kotri the Deputy Collector is the President and the Mukhtyarkar has invariably been elected to the office of Vice-President. The same is the case in Manjhand, the Mahalkari of the mahal being the Vice-President. In Tatta and Keti Bandar the Assistant Collector in charge of the division is the President and the Mukhtyarkar always the Vice-President. All these Municipalities derive their revenue principally from octroi duties. In Kotri and Keti Bandar there is a house-tax, but it scarcely yields as much revenue in the former place as fees from markets and slaughter-houses, nor in the latter as much as the cattle-pound. A refund of octroi duty is always granted if applied for on goods which are exported within two years, but all the refunds do not amount to more than 5 or 6 per cent of the receipts. The incidence of taxation ranges from Re. 1-4-2 per head per annum in Manjhand to Rs. 2-13-9 in Kotri. The heaviest charges on the revenues are always the maintenance of schools and the local dispensary and conservancy. The balance of the expenditure excluding working expenses and the collection of the revenue is on the repair and lighting of roads, buildings and the maintenance of gardens. Government pays to each Municipality

one-third of the amount expended by it on education and the Local Board always makes a contribution towards the dispensary. On the other hand the Municipalities pay something to the Local Funds for the services of their vaccinators. None of these four Municipalities has any debt. On the contrary their accounts show a credit balance, which, in the case of Keti Bandar, amounts to five times a year's revenue.

CANTONMENTS.

The Karachi Cantonment has existed ever since the conquest and an area of 2.92 square miles was reserved for it by Sir Bartle Frere when fixing the municipal limits in 1858. Its present area is 10.57 acres 23 gunthas (3 square miles). The Sadar Bazaar, which was originally included in the Cantonment, was handed over to the Municipality and an arrangement was made in 1896 whereby the Municipality, in view of the fact that it recovers wheel-tax, etc., from residents in the Cantonment, pays to the Cantonment Committee an annual sum of Rs. 7,000 for repair of roads, lighting, etc. Other sources of Cantonment revenue are land, house and conservancy taxes, etc., the income from which for the last ten years has averaged Rs. 40,982. The average expenditure, chiefly on conservancy, has been Rs. 42,704. The Cantonment Committee is constituted under the Cantonment Code of 1899 and consists of the officer who would succeed to the command of the Cantonment during the temporary absence of the Officer Commanding the Brigade as President, the Cantonment Magistrate as Secretary, the City Magistrate representing the District Magistrate, the Sanitary Officer, Executive Engineer and District Superintendent of Police, such Commanding Officers as may be appointed in Station Orders and an additional member, or members, appointed by the General Officer of the Command. If the President dissents from any decision of the Committee he may refer the matter to the Officer Commanding the Brigade; and similarly if the District Magistrate dissents from any decision of the Committee on the ground that it is prejudicial to the public health, safety or convenience, he may refer it to the Local Government through the Commissioner.

In October 1903 the whole of Manora was declared a Cantonment. The area included is 302 acres and 32 gunthas, Baba and Bhit not being part of it. The Committee consists of five members, one of whom represents the Port Trust. The Cantonment Magistrate of Karachi is the Secretary. The sources of revenue are a property rate on houses and lands, a sanitary cess on non-military residents and a tax on vehicles and animals. Until these imposts were legalized in November 1905, the Committee was dependent on a Government grant-in-aid. Since then its average income has been Rs. 3,938 and the average expenditure Rs. 3,203. The military roads in the Cantonment are maintained by the Military Works Department and the other roads by the Cantonment Committee.



Gul Hayat Institute

EDUCATION.

Tables XXIX-A, B, C and D.

CHAPTER XII IN "A" VOLUME.

Table XXIX-B shows the number of educational institutions existing in Karachi during the 20 years ending 1915-16 and the number of boys and girls receiving instruction in them. Those recognized by the Educational Department and assisted by Government are classed as Public, others as private. The Primary Schools described as Public indigenous are those which, though they do not teach according to prescribed standards and therefore do not receive grants-in-aid, submit to inspection and get a small subsidy on certain conditions. Under the present rules a grant-in-aid is made by Government from provincial revenues as far as possible to all schools which conform to the prescribed conditions. The grant in each case is assessed by the Educational Inspector, or by one of his assistants, and is limited to one-half of the local assets, or one-third of the total expenditure of the institution, during the previous official year except in the case of Girls' Schools where the maximum grant is equal to half of the expenditure, and the Indigenous Schools where the grant ranges from Rs. 2 to 6 for a boy according to the standards. For each girl the grant is double of that for a boy in the corresponding standard. The details of the expenditure will be found in Table XXIX-D. The duty of providing primary education devolves in rural and non-municipal areas on the Local Boards and constitutes in municipal areas one of the statutory obligations of the Municipality. The development of these institutions during the last twenty years is shown in Table XXIX-B. The extent to which the measures adopted by these public bodies are seconded by private enterprise is also exhibited.

All the Local Board Primary Schools are boys' schools and teach according to the superior standards. Some of the schools in the mofussil, having a small number of pupils, have been permitted to teach up to the 4th standard superior. Mussalmans constitute 57 per cent of the total number of pupils and 28·7 per cent of the pupils are the children of cess-payers. Education in these schools is

partly free. The percentage of pupils paying no fees in the Local Board Schools is 84·1. In 62 per cent of the schools no fees are charged, whilst in the remainder a small fee ranging from 6 pies to 2 annas a month is charged. Even in those schools there is a free list comprising 25 to 75 per cent of the pupils.

The tuition in Municipal Primary Schools is identical with that given in Local Board Schools teaching up to the 7th Vernacular standard. Under this head there are 14 Girls' and 19 Boys' Schools. Although Arabic-Sindhi Schools form the majority, there are many Gujarati Schools to meet the needs of the Parsis, Gujaratis, Cutchia, Memons and others who form a considerable portion of the population of Karachi. There are 2 Marathi Boys', 1 Marathi Girls', 1 Urdu Boys' and 1 Urdu Girls' Schools in Karachi; 1 Gujarati Boys' School and 1 Gujarati Girls' School in Tatta and 1 mixed school at Keti Bandar. There are also two night schools maintained by the Municipalities, one in Karachi and the other in Tatta, but schools of this description exhibit little vitality and constitute an inappreciable element in the educational system of the district.

Except Keti Bandar all the Municipalities charge school fees for boys, which usually range from 6 pies to 8 annas a month according to the standard. The number of Mussalmans receiving instruction in Municipal Primary Schools is about 36 per cent of the total.

Of the aided schools 22 are for boys and 12 for girls. More than half of them are Gujarati Schools, the rest being Arabic-Sindhi with the exception of a few Marathi and Devanagri Schools. Two of them are branches of the Church Mission High School and one of the Sind Madressah, to which they act as feeders. Seven of the 12 Girls' Schools have been started by the Church Mission Zenana Society in different localities in Karachi. Most of the Boys' Schools teach only up to the 4th Vernacular standard. After completing this course, a boy is transferred, if he wishes to acquire an English education, to an Anglo-Vernacular School, or to one of the High Schools, though it is open to him to prosecute his studies in the Vernacular up to the 7th standard in one of the schools teaching

up to this standard. The fees charged from boys in these institutions range from 1 to 8 annas per mensem according to the standard. The number of Mussalmans receiving instruction in Aided Primary Schools amounts to only 30 per cent of the total. Though under private management, all these institutions are classed as Public Schools because they are inspected by and conform to the standards of the Educational Department. They receive a regular grant-in-aid from Government. There are two Government Primary Schools at Manora.

The Indigenous Schools consist principally of Koran classes which have descended to the present times from the days of native rule. These classes, which are commonly held in mosques or in sheds adjoining the mosques, are attended by Mussalman boys and girls, whom the Mullah instructs in the reading of the Koran.

There are 14 Anglo-Vernacular Middle Schools in the district—10 at Karachi, 2 at Kotri (one European School and one Municipal School), 1 at Tatta and 1 at Manjhand. 3 out of the latter 4 are Municipal Schools and the former 10 are aided ones. The European School at Kotri was opened in 1870 and is aided by Government. The expenditure in 1915-16 amounted to Rs. 4,590, of which Rs. 1,250 was contributed by Government, Rs. 1,694 were met from fees and the rest from the municipal funds. The first five standards are taught in the school. The number of pupils on the rolls of the school in March 1916 was 83.

The school at Tatta which was opened about 1886 is also aided by Government and had 143 pupils on its rolls in March 1916. The expenditure in 1915-16 amounted to Rs. 6,440, of which Rs. 2,183 were contributed by Government, Rs. 2,556 were met from fees and the rest from municipal funds and other sources. The school teaches up to the first six standards. The school at Manjhand was started in 1915. It is only recognized, but it is not aided by the Educational Department. The school teaches up to the first three standards. There were 27 pupils in March 1916.

Other private Anglo-Vernacular Schools in Karachi which are aided by Government are the Madressah Husainy Boys' School and the Edward Jackson School at Kiamari. There are also two Girls' Anglo-Vernacular Schools, one

being a Parsi and the other a Church of England Zenana Mission School.

Under the class "English Middle Schools" recognized by Government there are only two at Karachi. One is the Girls' Convent School and the other the Parish School. They are classed as Indigenous and are paid a small grant by Government.

The Girls' Convent School at Karachi has existed separately since 1900 and teaches up to the 6th English standard. There were 205 girls on the roll at the close of the year 1915-16, mostly native Christians. Though organically distinct, this school is under the same management as the Convent High School, of which it was till recently a portion, and it is carried on in the same building.

The Manora School was founded in 1866 for the education of the children of Europeans and Eurasians resident at Manora and Kiamari. It is controlled by a Committee, of which the Port Officer is *ex officio* President, and taught by a mistress who has free quarters on the premises. There were 27 children (boys and girls) on the roll in 1915-16. The Kotri School was probably started at a very early date, when the Indus Flotilla and the terminal station of the Karachi-Kotri Railway brought together a considerable European and Eurasian population and Kotri was an important place. As an Aided Middle School it dates from 1884-85. It is controlled by a Local Committee. In 1915 there were 17 pupils on the roll, all Christians.

There is another English School at Kotri under Roman Catholic management, which is called St. Mary's School. It teaches up to the 5th standard of the secondary course, but it is neither registered nor aided by Government. It receives, however, a grant from the railway.

The Karachi Narayan Jagarnath High School was the first Government school established in Sind. It was opened in October 1855 with 68 boys. The building, which was situated at the junction of the Bandar and Mission Roads, was designed by Lieutenant Chapman and the Municipality shared the cost of erection with Government. It was superseded in 1876 by the present buildings, which have cost (inclusive of additions in 1896 and 1900) Rs. 63,294 and provide accommodation for 17 classes. The number

the old Chapel for the Boys' School, which had grown into a High School. The present building was erected in 1895 on a free site granted by the Cantonment authorities and cost Rs. 51,882, towards which Government granted Rs. 13,936 and the Roman Catholic Mission contributed Rs. 37,746. The building contains one large hall and 8 classrooms with accessories. In March 1916 the number on the rolls was 361, nearly all Europeans, Eurasians and native Christians. A few Hindus, Mussalmans, Parsis and Jews attend.

St. Joseph's Convent School has grown gradually out of the mixed school opened by the Reverend J. Willy in 1861. The girls were separated in the following year and taken charge of by some nuns of the Congregation of the Daughters of the Cross, and a single-storied building was erected for their accommodation. In 1870 an upper story and central tower 50 feet high were added and the school became a handsome and imposing structure. But as the number of boarders and day scholars increased, further accommodation became necessary, and a third story was added, providing spacious and lofty dormitories. In 1897 a large play-shed was built on the site of the old St. Patrick's Church, and in 1900 a new aisle was added on to the south end. The total cost of the building has been about a lakh, of which Government granted Rs. 25,000; the balance was raised by subscription. The accommodation now comprises 16 class-rooms, 2 refectories, 3 dormitories, 2 infirmaries and 19 other rooms, including the Sisters' quarters. In 1900 the school was divided into two distinct institutions—an English-teaching Day School for native Christians and others, which has already been mentioned under Middle Schools, and a Boarding and Day School for European and Eurasian girls, which teaches up to the High School standards. The number of pupils in the latter is about 219, of whom 60 are boarders. The joint institutions are managed by 12 nuns of the order above mentioned and 5 lay Sisters under a Lady Superior. They also carry on a school for the poor in a separate building in the compound.

The origin of the Church Mission High School was a private school started by Major Preedy, Collector of Karachi, long before Government had moved in the matter of

education. In 1846 Major Preedy entrusted his school to a committee of residents, who in 1853 passed it on to the Church Mission Society on the same condition on which they had received it, viz., that all instruction, as far as the subject permitted, should be imparted by means of Christian publications and that these should include the whole Bible. This condition is still observed. The Mission afterwards acquired Major Preedy's kacheri as a Mission House and the little building which he erected in the compound for his school is said to survive as the hall of the present school house. It now contains 14 rooms with accommodation for 250 boys. The number on the roll in March 1910 was 417, of whom 256 were Hindus, 77 Brahmins, 32 Jains, 35 Mussalmans, 9 native Christians, 2 Parsis and 8 Jews. The annual cost of the school, so far as it can be dissociated from the general Mission work, is about Rs. 6,600.

The Dayaram Jethmal Sind College originated in a memorial sent to the Education Commission which was sitting in Bombay in 1882, urging the desirability of establishing a college in Sind. The contribution guaranteed at that time not being considered sufficient, a Committee was formed to collect funds and was able in 1886 to offer an endowment fund of Rs. 75,000. To the interest of this the Municipalities and Local Boards agreed to add a sum of Rs. 10,850 per annum. Government, still declining to found a college, promised a grant-in-aid of Rs. 10,000 if one were founded. The Committee accepted the offer and started the Sind Arts College in a hired bungalow. The control of it was handed over to the Sind College Board, which was afterwards amalgamated with the society of subscribers, which had been registered as the Sind College Association. This arrangement has continued.

In 1887 His Excellency the Viceroy Lord Dufferin laid the foundation stone of the present College building, which was formally opened on 15th October 1893 by the Commissioner in Sind, Mr. (afterwards Sir Evan) James. It cost Rs. 1,86,514, of which Government gave Rs. 97,193, the balance being raised by subscription, to which Municipalities, Local Boards and private individuals of all classes contributed with remarkable liberality. The College was named "The Dayaram Jethmal Sind College" to perpetuate the memory of the late Honourable Mr. Dayaram Jethmal,

two of the members of whose family had contributed Rs. 25,000 for that purpose. The site for the College was granted by the Municipality free of charge.

In 1888 an Engineering class, which had existed in Hyderabad for some time, was made a branch of the College, Government promising an annual grant of Rs. 2,000 to assist it.

In 1894 His Excellency Lord Harris laid the foundation of a hostel on another site granted by the Municipality on the other side of the road fronting the College. It was opened in 1901 as the "Metharam Hostel" in honour of Rao Bahadur Diwan Metharam Gidumal, who contributed Rs. 15,000 towards its cost. The total cost was Rs. 1,18,935-6-8, of which Government granted one-half.

In 1916 the College took over the upper floor of the main building hitherto occupied by the Victoria Museum. In the same year a Biological Laboratory and a Swimming Bath were built.

The College is one of the most striking buildings in Karachi. Including its adjunct the Victoria Museum, it has a façade 431 feet in length, facing south-west on the Kacheri Road. The front consists of a plinth 5 feet high, supporting an open arcade of dressed stones running along the whole length of the building. In the centre is projected a portico of the Ionic order, surmounted by a pediment, in the tympanum of which a clock is placed. The pillars of the portico are 29 feet high. The central tower rises behind the portico to a height of 121 feet and has a dome 30 feet in diameter, built in stone. The portico leads to an open vestibule, which in turn leads to the main staircase, which is situated under the dome. The floors of these apartments are laid with Mosaic tiles from Belgium. The main staircase is 8 feet wide and is of ornamental cast-iron work. In the south wing is placed the lecture theatre of the College which is a spacious hall, 54 feet long by 34 wide and 35 feet high from floor to ceiling. The walls are pierced by arches at the level of the upper story, thus forming galleries for the use of the public when necessary. The College has, besides the hall, about thirty apartments, including lecture and classrooms, rooms for the Principal and Professors, the Lord Reay Memorial Library, a reading room, chemical and

physical laboratories, workshops, etc. The hostel has accommodation for 82 boarders and is always full.

The teaching staff of the College consists of a Principal, Vice-Principal and 9 Professors, assisted by seven teachers, Lecturers and Fellows. The course of instruction embraces the full curriculum in Arts of the Bombay University. In Engineering there is a three years' course, concluding with an examination conducted by members of the Public Works Department, success in which leads to appointment in that department.

There are 10 Government scholarships open to students in the College, besides 21 special scholarships and 10 prizes and medals provided by private generosity.

The fees are :—

Arts Branch Rs. 45 a term, Rs. 90 a year.

Engineering Branch " " " "

The number of students in the Arts Branch in 1915-16 was 268, of whom 181 were Hindus, 9 Brahmans, 39 Mahomedans, 19 Parsis, 18 Europeans and Eurasians and 2 Jews; and 33 Hindus and Mahomedans were in the Engineering Branch.

The average annual expenditure on the maintenance of the College is about Rs. 65,500 apart from the Engineering Branch which costs separately about Rs. 7,000. The income consists of the Government grant of Rs. 27,200, grants from Municipalities and Local Boards aggregating about Rs. 18,000; the interest derived from the Endowment Fund about Rs. 6,000, and fees which have risen in 10 years from Rs. 13,000 to Rs. 32,500. The total income in 1915-16 was Rs. 1,01,057 besides Rs. 6,377 derived from the Engineering Branch.

The first newspaper published in Sind appears to have been the "Sindian," which according to the old Gazetteer of 1876, had at that time been in existence for more than a quarter of a century. This became, or gave place to, the "Beacon," and then to the "Sind Times." In the meantime (in 1878-79) the proprietors of the "Civil and Military Gazette" at Lahore had started a Sind issue of their paper in Karachi, the name of which was afterwards changed to the "Sind Gazette." This

became the property of the late Colonel Cory, who edited it until 1902. From 1902 to 1912 it was edited by his daughter Mrs. Tate. In 1886 it was combined with the "Commercial Press" and the proprietorship transferred to a Joint Stock Company. At or about the same time, the "Sind Times," which had ceased to be European property, stopped publication so that there was no 'opposition.' This want was supplied by the starting of the "Phoenix" in 1888 under Indian management. It continues to the present day (1916). The "Sind Gazette," now called the "Daily Gazette," is the provincial organ of the European population and has a steadily increasing circulation. It is published daily. A bi-weekly paper called the "Sind Observer" is also published. Besides these, the "Sind Sudhar" may be mentioned as claiming to be the oldest vernacular paper in Sind. It was started originally by the Educational Department and handed over in 1884 to the since defunct Sind Sabha. It is now a private concern and appears to enjoy a large circulation.

The Karachi Municipal Library, or as it is commonly called, the Frere Hall Library, was originally the General Library, which was founded in 1852 under the presidentship of Mr. (afterwards Sir Bartle) Frere. There was at that time a Station Library, which was the property of the civil and military officers in the Cantonment and was not accessible to the rest of the community. Mr. Frere wished to found one which should be open to the public of all classes, with a graduated scale of subscriptions. So a Library was started and accommodated in a room of the Gymkhana, or the Ladies' Club as it was then called. It was declared to be public property, inalienable without the consent of Government, and the management was entrusted to a Committee consisting of some ex officio members and others elected by the subscribers. With it was combined a Museum, which was probably the one originated by Sir Charles Napier when he was Governor of Sind. The Library and Museum soon out-grew the limited accommodation available in the Ladies' Club and Mr. Frere appealed to Government for help to add two wings to the room. He obtained Rs. 6,000 from Government and Rs. 2,472 more were subscribed. At the same time he got a grant of Rs. 1,000 and a promise of Rs. 600 a year more on the condition that a free Reading Room was maintained.

The institution still grew and in 1862 a proposal was received from the Municipality that the existing building should be sold and the proceeds given to the Municipality as a grant towards the erection of the Frere Hall, in which rooms for the institution should be provided. The members were willing to agree to this proposal only on condition that they were guaranteed in undisturbed and uncontrolled possession of their Library and Museum. After some years an agreement was come to, which was sanctioned in Government Resolution No. 1881, dated 9th August 1870, and the Karachi General Library was handed over to the Municipality on the understanding that the Committee of Management should be appointed one-half by the Municipality and one-half by the general body of subscribers. This is still its constitution and the rules provide that one room shall be open to the public free of charge as a Reading Room and one room shall be set apart for the exclusive use of the subscribers. The Museum was separated from the Library in 1892 and the collections transferred to the new building described below, the management of them being entrusted to a new Committee by the Municipality at the request of the Library and Museum Committee, who were of opinion that they could not superintend the affairs of both institutions when separately located.

The Native General Library is supposed to have been founded before 1850 and has accumulated nearly 3,000 volumes, including some rare and curious works. Every year a sum of Rs. 250 or 300 is set apart for the purchase of new books and the Reading Room is supplied with newspapers and periodicals. The Library, as its name implies, is intended for and used principally by educated natives of all classes. It was located till 1905 in an old building of unknown date. This was pulled down and the Library was transferred in the following year to the Ghulam Hussein Khalikdina Hall. The control of the Library still vests in the subscribers.

HEALTH.

Tables XXX-A and B, XXXI, XXXII and XXXIII.

CHAPTER XIII OF "A" VOLUME.

There are three hospitals in the district—the Civil and Lady Dufferin Hospitals in Karachi and the North-Western Railway Hospital at Kotri.

The Karachi Civil Hospital is one of the oldest British institutions in Sind and there appears to be no clear record of its origin. It

Civil Hospital.

is known that the central part of the old building, which is in the Runchore Lines quarter and stands on the Mission Road, was built by Government in 1854 at a cost of Rs. 6,878, and that it was added to in 1859 by the Sind Railway Company, recently established. Other additions were made and in 1905 it contained 8 wards and 79 beds. It was then completely re-built, and the hospital as it now stands forms one of the most imposing groups of buildings in the city. The following buildings are comprised in the group:—

1. A Dispensary, in which out-patients are attended to and new patients seen before admission. It is a single-storied building, paved throughout with marble, containing two large waiting rooms for men and women, with separate examination rooms, dispensary, drug and linen stores, etc.

2. The Diamond Jubilee Block, next to the dispensary, consisting of nurses' quarters. The funds for this were raised by public subscription and the foundation stone was laid by Their Excellencies Lord and Lady Curzon in 1900. This building has since been added to, and there are now quarters for 27 nurses.

3. The Surgical Block.—This is the central building and comprises the hospital proper. It contains the Civil Surgeon's room, recruits' examination room, 4 wards for men and 1 for women, each 26 feet by 17, and a small spare ward, all on the ground floor. The upper story contains 6 wards for Europeans, each 26½ by 17½ feet, 4 bath-rooms, a duty room, matron's room, etc. The front verandah is 12 feet wide, the back verandah 10 feet. The wards are paved with white marble and have white tiled dadoes, while the bath-

rooms have pavement and dadoes of Minton tiles. The verandahs, passages and, in fact, all floors not paved with marble are covered with small hexagonal Italian tiles. All corners are rounded off to prevent the accumulation of dust and the large steel girders are cased with cement concrete for the same reason. A large operation room is attached to this block on the ground floor.

4. *Medical Block.*—This stands to the right of the last and is connected with it by a covered way. It contains, on the ground floor, 2 wards, 26 feet by 17, for Mussalmans, 1 for women, 1 for high caste Hindus and 2 for low caste Hindus, 25 beds in all; and on the upper floor 6 wards for paying Indians, 25 beds in all. The bath-rooms, etc., are as in the Surgical Block.

5. *Police Block.*—This is similarly situated on the left of the Surgical Block and contains 2 large wards, 37½ feet by 26 each, for ten men; on the ground floor, and the same on the upper floor.

6. *Septic Block.*—This stands to the rear of the hospital proper, and is provided with a special operation room. It contains wards with accommodation for 6 Mussalmans, 4 women, 4 high caste Hindus and 6 low caste Hindus.

7. A mortuary, four strong wards for supposed insanes under observation, quarters for the House Surgeon, ample kitchens and outhouses make up the remainder of the group of buildings, the total cost of which was Rs. 5,72,649.

The hospital is in charge of the Civil Surgeon, who has under him a House Surgeon, 3 Sub-Assistant Surgeons, 3 compounders, etc. The nursing staff consists of a Lady Superintendent, an Assistant Lady Superintendent, 3 Sisters, and 22 nurses. The cost of the maintenance of the hospital was for the year 1916 Rs. 58,341-12-11. Subscriptions of Rs. 6,313-8-0 and Rs. 12,414 were received in that year from public and semi-public bodies towards the expenses of the Nursing Association. The nursing staff is provided by this Association, and the arrangement is that Government contribute one-half of the expenses whatever they may be.

The latest development of the hospital is the erection of an eye hospital to be known as the Seth Goverdhandas Motilal Mohatta Eye Hospital, in honour of the Seth of that name who has contributed Rs. 70,000 for the purpose. The building is to be erected on the site of the House Surgeon's quarters facing Mission Road. Pending its construction, work is being carried on in a temporary structure. For his munificent generosity the title of Rao Bahadur has been conferred on Seth Goverdhandas.

The Lady Dufferin Hospital opposite the Civil Hospital was opened on 5th November 1898. **Lady Dufferin Female Hospital.** It is maintained from grants by Government, the Karachi Municipality and the District Local Board, subscriptions, donations and the interest of the Reserve Fund, and is controlled by a Committee, of which the Collector of Karachi is the Chairman. The building which cost Rs. 1,05,000 was presented by Mr. Edulji Dinshaw, C.I.E., of Karachi. Besides the Lady Physician, the Matron and nursing staff at the hospital, the Committee maintain an Assistant Lady Doctor at the Jaffer Fudoo Dispensary for the benefit of women and children living in that part of the city. Within the last few years the work of the hospital has expanded considerably, and to meet the demands upon it an operation theatre, nurses' quarters and a maternity wing have been opened.

In connection with the hospital and situated within the same compound is an institute for the training of Indian midwives, named the Louise Lawrence Institute, founded in memory of Mrs. Lawrence, wife of a Collector of Karachi, who died in 1912. To commemorate her name and work a sum of over Rs. 75,000 was collected by popular subscription, and was expended in erecting and maintaining the very fine building in which the institute is housed. The work of the institute is comprised under four heads—(1) attending maternity cases among the poor, (2) training of midwives, (3) partial training of *daïs* and (4) lectures to married women. The work is under the control of the Lady Dufferin Hospital Committee, and the institute is in fact an integral part of the hospital.

The hospital at Kotri was built and is maintained **North-Western Railway Hospital at Kotri.** by the North-Western Railway for the benefit of its own employes, but

passengers falling ill, or receiving injuries, are also treated at it. It was opened in 1903: the cost of the building was Rs. 25,701.

There are two Government dispensaries in Karachi.

Dispensaries. The one at Manora is a very ancient institution, dating back to 1856. The

remoteness of Manora, where there has always been a considerable establishment of Government servants, made it a necessity. There is an Assistant Surgeon in charge. The other is for the establishment of the Commissioner in Sind, and is almost, if not quite, as old, for the records mention an Apothecary attached to the Commissioner's Dispensary as long ago as 1859. It ranks as a Private Aided Dispensary and there is a Sub-Assistant Surgeon in charge. Of the remaining dispensaries, one in Karachi Cantonment is maintained by the North-Western Railway and the rest by Municipalities and Local Boards, though some of them owe their origin to private beneficence. There are also many dispensaries in Karachi kept by private practitioners.

Besides these there is a Veterinary Dispensary in Karachi which is not included in the

**Richmond Crawford
Veterinary Dispensary.**

table. It was started in a hired building in 1892 and removed in 1895 to its present premises on the Bandar Road. They cover an area of about 10,000 square yards and include in addition to the dispensary separate wards for horses, cattle and dogs, besides an isolation ward and one built for its own purposes by the Society for the Prevention of Cruelty to Animals. There is a shoeing forge also. The cost of the buildings which amounted to Rs. 12,000 was borne equally by the District Local Board, the Karachi Municipality and the general public. The institution was named in honour of Colonel Crawford, for many years Collector of Karachi. A Veterinary Graduate is in charge of it. The cost of maintenance is borne by the District Local Board, contributions of Rs. 1,500 and Rs. 600 being received annually from the Karachi Municipality and Government respectively. In 1915-16 Rs. 4,702 were realized from fees and shoeing charges. In the same year 91 major and 273 minor operations were performed.

ADMINISTRATION.
CHAPTER XIV OF "A" VOLUME.

The Karachi District has 9 talukas and 3 mahals as shown below:—

Taluka or mahal.	Headquarters.	No. of houses.	No. of dobs.	Limits.	Area in square miles.	Popula- tion.	Average annual land revenue.
Shahbander Taluka.	Ladim	10	134	23° 41' and 24° 22' North Latitude, 67° 32' and 68° 30' East Longitude.	1,516	22,123	Rs. 88,019
Jati Taluka	Mugholtabin	10	135	23° 35' and 24° 38' North Latitude, 68° 1' and 68° 18' East Longitude.	2,145	33,847	1,07,748
Sujawal Taluka	Sujawal	12	74	24° 27' and 24° 52' North Latitude, 68° 1' and 68° 18' East Longitude.	269	34,630	1,11,339
Mirpur Bathoro Taluka	Mirpur Bathoro	12	63	24° 30' and 25° 1' North Latitude, 68° 9' and 68° 20' East Longitude.	269	38,942	1,24,945
Tatta Taluka	Tatta	8	39	24° 31' and 25° 47' North Latitude, 67° 54' and 68° 24' East Longitude.	1,925	47,221	58,085
Mirpur Sakro Taluka	Mirpur Sakro	10	79	24° 14' and 24° 51' North Latitude, 67° 9' and 67° 55' East Longitude.	1,138	31,238	56,540
Gharaheri Taluka	Kotri, Alidrahkio Shah.	10	99	23° 53' and 24° 34' North Latitude, 67° 22' and 68° 2' East Longitude.	264	31,755	74,440
Koti Bandar Mahal.	Koti Bandar	10	99	23° 53' and 24° 17' North Latitude, 67° 22' and 67° 46' East Longitude.	264	1,784	74,440

Karachi Taluka	Karachi	8	02	25° 40' and 25° 20' North Latitude, 66° 42' and 67° 22' East Longitude.	1,077	150,772	61,700
Kotri Taluka	Kotri	8	28	25° 14' and 25° 52' North Latitude, 67° 55' and 68° 20' East Longitude.	998	40,405	20,605
Mamhond Mahal	Mamhond	6	20	25° 40' and 25° 33' North Latitude, 67° 25' and 68° 20' East Longitude.	584	21,800	40,444
Kohistan Mahal	Thano Bata Khan	1	2 (28 sq. miles)	21° 55' and 20° 3' North Latitude, 67° 19' and 67° 09' East Longitude.	1,900	18,463	3,740

Makans are given on
5 years' lease and a
fixed revenue has
been levied since
1900-01.

The first four constitute the Shalibandar Sub-division, of which an Assistant Collector has charge. He has an old bungalow in a large garden at Sujawal, which was formerly his headquarters, but he now resides at Karachi during the hot season.

The next four talukas and the Keti Mahal are the Tatta Sub-division, of which an Assistant Collector has charge. He is provided with a bungalow at Tatta, but makes his headquarters at Karachi during the hot season.

The Kotri Taluka and the Manjhand and Kohistan Mahals, comprising the Kotri Sub-division, are under a Deputy Collector who has his headquarters at Kotri.

Each of the Assistant Collectors and Deputy Collectors is President of the Taluka Local Boards in his charge, while the Assistant Collector, Tatta, is President of the Tatta and Keti Bandar Municipalities, and the Deputy Collector, Kotri, President of the Kotri and Manjhand ones.

The revenue work of Karachi City is performed by a City Deputy Collector, whilst the City Magistrate is Sub-divisional Magistrate for Karachi. Both work directly under the Collector and District Magistrate. The Collector is in addition to his other duties ex officio Superintendent of Stamps for the province.

Gul Hayat Institute

PLACES OF INTEREST.

CHAPTER XV OF "A" VOLUME.

Bhambor is the local name of a mound of ruins on a low rocky elevation situated on the north bank of the Gharo creek, three and a half miles westwards from the village of Gharo in the taluka of Mirpur Sakro, and about a quarter of a mile to the left of the road to Karachi. The remains of a fort, with walls and bastions, are distinctly traceable, and from among the heaps of broken bricks old coins have frequently been picked up after a fall of rain. No collection of them has, however, been systematically made. From the mound an old dam runs to hilly ground in the north, holding up rain water and forming a lake. As the Gharo creek is the most westerly channel of the Indus, it is probably the oldest and seems more likely than any other to have been the one down which Nearchus sailed. This also gives an air of probability to the hypothesis that Bhambor, and not Tatta, nor any of the other places that have been suggested, was the great Hindu town known as Debal, which was the first object of attack when Muhammad Kasim invaded Sind. But there is not room on the site for a town of any size and no direction in which it could have extended. Bhambor is said to have been destroyed by an earthquake at the same time as Brahmanabad, i.e., about the middle of the 8th century according to the *Tuhfat-ul-kiram*. Sasui, the heroine of the romance of Sasui and Punhun ("A" Volume, page 484), was the adopted daughter of a washerman of Bhambor.

Dharaja.

See Lahoribandar.

Gharo is a village in Mirpur Sakro Taluka, situated on a small creek between Dabheji railway station and Mirpur Sakro. It is seven miles distant from Dabheji and contains a Staging Bungalow, Vernacular School, Post Office and *musafirkhana*. A bridge of four arches, built in 1860, spans the creek a little to the east of the village. Formerly Gharo was an important post on the route from Karachi to Tatta and Hyderabad, boats reaching it by the creek from Ghizri Bandar in less than 24 hours. The creek

Gharo.

was navigable for vessels of 13 *kharars* as far as the town. It is still accessible to small boats at high tide.

Jam Tamachi-ji-mari, the palace of Jam Tamachi, is an interesting ruin situated on a hill at the north end of the Sonahri Dhand, near Hillaya in Tatta Taluka. The Jam Tamachi referred to was the second of that name and apparently the sixth in the succession of the Sama rulers (see "A" Volume, page 98). He reigned for thirteen years in the second half of the 14th century. He fell in love with a fisher maid, Nurahi the daughter of Gandrah, who fished in the Kinjhar lake below the hill on which the *mari* stands, and made her his queen (i.e., one of them). The story is told in one of the popular songs of Abdul Latif. They appear to have died at Tatta, for two humble tombs are pointed as theirs to this day at the north end of the Makli hills near the mausoleum of Sheikh Himad Jamali.

Jerruck (Jhirak) (25° 3' north latitude and 68° 18' east longitude), a town in the Kotri Taluka, is situated close to the Indus, at an elevation above it of 150 feet, on the range of limestone hills that runs along its right bank south of Kotri. From its situation, commanding the river as well as the roads from Karachi and Tatta, it was considered a position of some importance by Sir Charles Napier, who made it a Military Depot. Afterwards it was an outpost garrisoned by a company of sepoy. It was also the headquarters of the Deputy Collector. It now contains an Assistant Collector's bungalow, two *musafir-khanas*, a Vernacular School, Post Office and Dispensary. For many years it has been a Missionary Station. It had a Municipality, but that was abolished in 1878. On a hill to the north of the Kotri road and close to the town is the grave of an Assistant Surgeon Robert Hussey, who died here in 1850, and in another spot lie the remains of the Reverend C. Huntingdon, Chaplain of Hyderabad, who died here on his way to Karachi on May 27th, 1856.

Jerruck is connected, by road, with Tatta, Kotri and Meting, which latter is the nearest railway station, thirteen miles distant. On a flat hill situated in Deh Shekhani of the Tatta Taluka, about 300 yards to the east of the road

from Jerruck to Tatta, and about 3 miles from Jerruck, there are the remains of a Buddhist town. The square basement of a *stupa*, about 30 feet each way and about 4 feet high, is still there. The fallen superstructure has been removed and piled up all round. It was here that Mr. W. Cole, once Collector of Customs in Karachi, found some Buddhist bricks which were afterwards deposited in the Karachi Museum and subsequently allowed to disappear. As they and any record that may have accompanied them are lost, the following account of their finding may be quoted from Sir R. Burton :—" Mr. W. Cole, when Deputy Collector, found, during a chance visit, a large fine grained brick which induced him to trench across the mound. Presently he came upon the top of a wall, and having cleared it down to the level of the hill surface, he opened a building about 85½ feet square. The material was of bricks, each 15½ by 9½ and 2½ inches; the courses were laid without other cement than the fine mud of the Indus, mixed with some fibrous substance. The base showed a bold moulding and at intervals of six feet appeared square projections, as for pilasters. The potteries were in great variety: some moulded and others cut when the clay was soft; most of the human figures were defaced, but the iconoclast had not taken the trouble to break up the architectural ornaments in terracotta." The people have no legends about this place, but consider it the remains of a "Kafar Kot," i.e., heathen fort, and it is sometimes called by them "Kot Raja Maji Rae." The hill cannot be mistaken, as it is detached from the others, and from its flat summit a splendid view of forest, hill and river is obtained. Good felt (*tal*) is made in Jerruck.

Jhimpir, a village near the railway station bearing

the same name, contains a temple of

Jhimpir. Shiva where an annual fair attended

by about 800 Hindus is held in February. At a distance of two and a half miles from it to the east is the shrine of Amir Pir, which, although of no architectural interest, dates back to the early Mahomedan times. The mausoleum of the saint is built on a bold cliff overlooking the Sonahri Dhaud, which, when joined to those of the Kinjhar lake, forms one of the most beautiful sheets of water to be seen in Sind, bounded as it is by distant red hills and forests. The saint is not, however, buried in the mausoleum, but in a

deep cave under the rock, to which steps lead down, first into a court of cells occupied by pilgrims during the annual fairs, then into a smaller courtyard shaded by willow trees, which is kept scrupulously sacred, and then into the inner gloom of the cave. An annual fair is held and is attended by about 1,500 people. There is a house on the rock built for the accommodation of His Highness the Agha Khan, the spiritual head of the Khoja sect, and a number of other houses belonging to headmen of the community, who reside in Karachi, Mirpur Bathoro, Hyderabad and other places in Sind. The connection of the Khojas with this region dates from the time of the British conquest, shortly before which the grandfather of the present Agha Khan came to Sind from Persia. Sir Charles Napier appointed him to command the Camel Corps which he had organized and which was stationed at Jerruck. Some of his proceedings, however, gave offence to the Baluchis who attacked him and drove him out of the place. The colony of Khojas remained, but they have been for the most part ruined and their lands absorbed by the neighbouring zamindars.

Jhok is a small village on the banks of the Mulchand canal, between Mirpur Bathoro and Bulri. It is seven miles distant from Mirpur Bathoro. It contains a shrine of one Shah Inayatullah, which consists of a domed tomb faced with encaustic tiles and inscribed with Arabic scrolls of the holy names. A mosque adjoins it and the buildings stand in an extensive compound. Shah Inayatullah was a Sufi and is revered throughout Sind and named Sar Taj Sufan, "Crowned Head of Sufis," and Sardar-al-ashkan, "Leader of all Lovers." He was born at Miranpur, a village which is a mile distant from Jhok; in 1660 A.D., and is said to have been under the instruction of Khwaja Abdul Malik, great-grandson of Pir Dastgir of Baghdad at Burhanpur in Bengal for a term of five years, at the end of which period he was awarded a sword, a cap and red apparel, granted the title of Sufi and permitted to instruct disciples. He made so many disciples, both among Hindus and Mussalmans, that the Saivids of Bulri grew jealous of him and got the Governor of Tatta to send a report to the Emperor at Delhi which resulted in Nur Muhammad Kalhora being commissioned to destroy him. The latter accordingly besieged Jhok with

**Jhok. Shrine of Shah
Inayatullah Sufi.**

a large force, but Shah Inayat's fakirs were too strong for him; so he made peace and gained his end afterwards by assassination in 1717 A.D. ("Tuhfat-ul-kiram"). The saint's head was forwarded, according to the local tradition, to Delhi, reciting poems on the way. An annual fair is held at the shrine on the 17th day of Safar and lasts for three days and is attended by about 1,500 people.

Karachi (formerly spelt Kurrachee), situated in 24° 51' north latitude and 67° 4' east longitude, is the headquarter town of the Karachi District and the capital of Sind, the seat of Government and of the chief court of judicature, and the headquarters of the Karachi Brigade and also of those heads of civil departments whose jurisdiction extends over the whole province. Besides being the official civil and military centre of the province, Karachi is the third port of India in order of commercial importance, having a volume of trade inferior only to that of Calcutta and Bombay. The firms represented on the Chamber of Commerce numbered 56 in 1910. In addition to local houses there are numerous agencies of merchants and traders doing business at Lahore, Delhi and other towns. Finally, Karachi is both the nearest port in India to Europe and the nearest maritime terminus of the whole system of railways that serve Sind, British Baluchistan, the Punjab and the north-west of India, and its harbour presents exceptional facilities for the shipment and landing of goods and for the embarkation and disembarkation of passengers and troops. These conditions have brought together a very heterogeneous population of 151,903, as enumerated at the census of 1911. The municipal limits which extend from Clifton and Ghizri on the one side to the Maurypur Salt Works on the other enclose an area of about seventy square miles.

The present position of Karachi will be better understood after a brief review of its history. It has been confidently identified with Alexander's Haven and much ingenuity has been expended in efforts to trace Krokala, Eiros, Bibacta and other places mentioned by Nearchus; but anyone, who has observed the evidences of every recent recession of the sea at Clifton and Ghizri and of the rapid erosion of the Oyster Rocks still in progress, will find reason

to believe that 22 centuries have probably altered the whole aspect of the coast beyond all possibility of recognition. However that may be, it does not appear that there ever was a town on the site of Karachi, or anywhere near it, until two centuries ago; for, with the exception of a haven, which is the only one between Makran and Cutch, it lacks all the natural advantages that conduce to the rise of cities. The trade of Sind sought one of the commercial towns which succeeded each other on the ever-changing mouths of the Indus, while that of Baluchistan came down to a port formed by Cape Monze and the Habb river. But when the latter began to silt up so that large vessels could no longer enter it, the wealthy Hindu merchants of the place began to cast about for a new settlement and fixed on a back-water called Kalachi Kun, to which the sea found entrance over a bar known as Nawa Nar, near to the island of Baba in the present Karachi harbour. The present entrance to the harbour was at that time blocked by a rocky reef extending from Manora to the Oyster Rocks, which has since crumbled away. Such is the story told by Seth Naomal, a descendant of one of these Hindu merchants, in a manuscript family history which is still in the possession of his grandson Rao Bahadur Alomal Trikamdas. Other local accounts differ slightly, affirming the existence first of a large town called Karak on a lagoon some miles west of Karachi, from which it moved eastward on the silting up of the passage from the sea. In either case we know that the new settlers put themselves under the protection of the Jam of the Jochlas, who was the recognized blackmailer and guardian of the trade routes, and prospered and gradually sucked away the trade of the Indus ports. Subsequently they fortified their town with walls of mud and brushwood and mounted thereon some pieces of ordnance brought from Maskat, and it became Kalachi (or Karachi) Kot. It belonged to the Khan of Kalat, to whom it had been given by the Kalhoras as blood-money for one of his brothers slain by them in battle, but Ali Fateh Khan, the first of the Talpurs, cast a covetous eye on it. Twice he sent an expedition to take it; but the Hindu merchants collected their clients and dependents, landed marines from their ships and beat the assailants off. When a third attack

was made in 1795, the Khan of Kalat, being in difficulties himself and unable to help them, they negotiated and, being offered honourable terms, surrendered. The Mirs put a Governor in command, but treated the merchants most considerately and fostered the trade, which brought them an annual revenue of nearly a lakh of rupees (in 1838 it was estimated at a lakh and a half). In 1797 they built a fort on Manora as a defence against attack by sea. It was from this fort that fire was opened on the S.S. "Wellesley," which was entering the harbour with the "reserve force" which the conduct of the Mirs had made it advisable to keep in Sind after Sir J. Keane's army passed on to Kabul.* The guns of the "Wellesley" did not take long to knock down the shabby walls, and Rear-Admiral Maitland, with Brigadier Valiant, took possession of the fort and also of the town of Karachi on February 7th, 1839, but pledged themselves to hold the persons and property of the inhabitants sacred and not to interfere with the government of the town. British troops were landed and encamped about two miles from the walls, and so matters remained until the battle of Miani. A visitor in 1841 wrote afterwards: "Kurachee was the residence of many ladies whose husbands' duty required them to penetrate further into the country, so that there was a larger society than is generally to be met with at an outstation. Monday and Friday evenings were the gay times. The band of H. M.'s 41st played on the parade ground and the beauty and fashion of Kurachee were seen assembling in groups." This was the birth of Karachi Cantonment and to this period belongs the interesting old burial ground on the Bunder Road. The native town, as it was in 1857, is thus described by Sir Richard Burton: "The town is a mass of low mud hovels and high mud houses, with flat mud roofs, windowless mud walls and numerous mud ventilators, surrounded by a tumble-down parapet of mud built upon a low platform of mud-covered rock. This is the citadel: it fines off into straggling suburbs below, extending far northwards." "The dark narrow alleys, through which nothing bulkier than a jackass can pass with ease, boast no common sewer." There were

* According to a popular account of this incident which was current afterwards there was no garrison in the fort and the solitary gun fired therefrom was meant for a salute.

two gates—the Kara darwaza facing the sea, and the Mitha darwaza leading to the Lyari and sweet water wells. In front of the former a spit of dry land extended to the Customs House and white mosque, to which passengers were brought in canoes at high water from vessels anchored at Kiamari.

When Sir Charles Napier transferred the seat of Government from Hyderabad to Karachi, the place began to develop. The histories of the trade, the Port, the Municipality and other institutions, which make up the story of the growth of Karachi during the seventy years since, are given in their appropriate places.

The first object that arrests the attention of the traveller approaching Karachi from the sea is the rocky headland of Manora, 100 feet high, with its Lighthouse, Observatory, little English Church and many other buildings. It is now a Cantonment, occupied by the Royal Garrison Artillery in charge of the harbour defences. The Indo-European Telegraph has also its Cable Factory and a considerable settlement here, and it is the residence of the Port Officer and other officials of the Port Trust, including the Pilot establishment. The tomb of a wonder-working Pir, who was buried here, attracts crowds to an annual fair, and Hinduism is also represented by a conspicuous, but not ancient, temple. Manora is self-contained, has its own Church (St. Paul's, consecrated in 1865), school, library, billiard room, tennis courts, etc.

Opposite Manora and forming the other side of the entrance to the harbour is the Kiamari groyne, 8,300 feet long. Beyond it are the wharves, and the settlement known as Kiamari. The road leads direct from the boat basin to Karachi. On landing, the traveller first passes through the Sydenham Passenger Pavilion and enters Willingdon Place. To the right

of this lies the Port Trust village, to the left the wharves and the railway (these are described in detail on page 86 below). Further on is the Bachubai Edulji Dinshaw Hospital, supported by the Municipality, North-Western Railway and Port Trust; then the McHinch Memorial Seamen's Rest, built by the Port Trust in 1904 at a cost of Rs. 30,833. The nucleus of this amount was a sum of Rs. 11,102 raised by subscription to commemorate the late Mr. Alexander

McHinch, C.I.E., a well known Karachi merchant and public man. To this the Port Trust added Rs. 8,386, the Municipality Rs. 3,000, the Chamber of Commerce and individual members of it Rs. 3,350, and Government Rs. 5,000. The Rest is supported by subscriptions with some help from Government, and is controlled by a Committee, on which the Port Trust and all the Churches of Karachi are represented. It provides reading and refreshments for seamen of all classes and creeds and also supplies the place of a Sailors' Home, as far as that is required at this Port.

At the Seamen's Rest the road leaves Kiamari Island, the limits of which have been much obscured by reclamation, and runs along the Napier Mole, on the left side of which, about a mile from the Rest, stands a monument to Sir Charles Napier. The original monument was an obelisk on a pedestal, about 13 feet high, built of ill-dressed stone and bearing on one side the following inscription:—

Napier Obelisk.

" From this spot on the 1st December 1847 was fired the farewell salute to His Excellency Lieutenant-General Sir Charles Napier, G.C.B., on his retirement from the Governorship of Sind, being the extreme point to which at that date wheeled carriages had ever passed along this bunder, a work planned and executed under the Government of His Excellency and was just completed at the date of his departure from this Province.

ERECTED 1853.

REBUILT 1901."

For many years it was surrounded and concealed by plague sheds: these, however, were removed and the monument exposed to view. It was, however, generally recognized to be utterly unworthy of its subject, and in 1913 the Port Trust erected at its own expense a handsome Aberdeen granite obelisk with the words "Sir Charles Napier, G.C.B., Governor of Sind" on the face fronting the road, and below these words have been inserted the original inscription which has been quoted above. At the end of the Napier Mole, after passing over the screw-pile bridge 1,200 feet long, which was built in 1865 to span the cutting made

through the Mole that the creek might scour the harbour, the main land is reached. The road then proceeds over a handsome stone bridge, 1,540 feet in length, beneath which the railway passes. This bridge was opened in April 1911 by His Excellency the Viceroy, Lord Hardinge, and is named after him. Its construction and the diversion of the railway necessitated the removal of the old Port Trust Office on the left of the road as one crossed the bridge over the creek from Kiamari, and the old Customs House, which spanned the road on five arches. To the left of the Hardinge Bridge now stands the new Port Trust Offices, the handsomest and most imposing building in Karachi, built at a cost of Rs. 8,00,000 and opened in January 1916. Beyond it and physically contiguous, the new Customs House is in course of construction.

A short distance further on is the Merewether Clock Tower, a fine memorial raised by public subscription to a former Commissioner in Sind. It is a memorial also of Mr. J. Strachan, the Municipal Engineer who designed it and many other public buildings in Karachi. It is in the middle, pointed style of Gothic architecture and has the form of an Eleanor cross. Standing on a basement 44 feet square, it rises to a height of 102 feet and carries, at an elevation of 70 feet, a clock with four faces, each 7 feet in diameter. The large bell, which strikes the hours, weighs 3 cwt., and the smaller bells, for the quarters, 1 cwt. each. The foundation stone was laid by Sir James Fergusson, Governor of Bombay, in 1884, and the completed structure was opened to the public and made over to the Municipality by Sir Evan James in 1892. The total cost of the structure and clock was Rs. 37,178.

The Merewether Tower cleaves the road. The branch to the right is the McLeod Road, named in honour of a public spirited Collector of Customs of Sir Bartle Frere's time. The Bunder Road continues its course on the left of the tower. Between it and the Lyari river, half a mile further to the left, lies the Old Town of Karachi, deprived of its wall and much changed by sanitation and other innovations, but still retaining many of the old alleys to which Sir Richard Burton alluded.

Between the Bunder and McLeod Roads, about half a mile behind the Clock Tower, was the old Kafilā Serai, now absorbed in the Sind Madressah, where the camel caravans from Khorassan used to put up, outside the city walls. On and between the Bunder and McLeod Roads beats the commercial heart of Karachi. Here all the leading firms have their places of business. On the McLeod Road is the Ionic front of the Bank of Bombay, built, from a design by Mr. Strachan, in 1888; next to it is the Judicial Commissioner's Court, built by the old Bank of Bombay in 1866, and bought by Government when it failed; then the National Bank and opposite to it the new and handsome offices of McKinnon, MacKenzie and Company, the Shipping Agents, the City Station of the North-Western Railway with nearly half a mile of goods-yards behind it, and the Central Post and Telegraph Offices; further on, iron-works which have been closely associated with the progress of Karachi for fifty years past, a little beyond which the McLeod Road falls into the Kacheri Road. Behind the Post Office, on the Kacheri Road, overawing all, rises the great pile of the Dayaram Jethmal Sind College. On the Bunder Road to which we now return, stand the Boulton Market,

Bunder Road.

the Max Denso Hall, the site of the old Jail, on which Government offices are to be erected, the High School, the Khalikdina Hall, the first English burial ground opened in Sind, the Small Cause Court, the Travellers' Bungalow of ancient days and later converted into a hotel, the Richmond Crawford Veterinary Dispensary and the Tramway Stables. As many of these places indicate, the Bunder Road must have been one of the first roads laid out in Karachi, leading as it did from the Bunder to the barracks and parade ground of the Native Infantry regiments, and it is still a main artery. Off it to the left, past the High School corner, runs the Mission Road to the little Mission Church and the school founded by Major Preedy, the first Collector of Karachi, in 1846, and handed over in 1853 to the Church Missionary Society's missionaries, who now live in the bungalow that was Major Preedy's Kacheri. On this road before reaching the Mission we pass the new Civil Hospital and the Lady Dufferin Hospital. Nearly opposite to the Mission Road another old artery takes off from the right of the Bunder Road. This is

the Kacheri Road, which, after passing Government House at a distance, reaches the Civil Lines a little less than 4½

Civil Lines.

miles from Kiamari. Here are the Frere Hall, the Statues of Queen Victoria and of King Edward, the Sind Club, the Y. M. C. A., the Masonic Hall, Holy Trinity Church, and the Gymkhana, an institution which has existed since the time of Sir Bartle Frere, if not from an earlier date, when, inasmuch as the word gymkhana had not been invented it was called "The Ladies' Club" and occupied an old bungalow on the road that now bounds it on the south-east. The backbone of Civil Lines is Victoria Road, a really fine thoroughfare, which, coming from the Sudder Bazaar, passes all these buildings, unites with the Kacheri Road at the railway and, crossing it, continues nearly three miles out to Clifton.

Parallel to Victoria Road on the east is Elphinstone Street, and behind and parallel to it

Cantonment.

Frere Street, which runs in a straight line from the Bunder Road, where we left it, to the Cantonment Station, which was at first called Frere Station, and south of which is a triangle of bungalows originally known as Frere Town. This line is the nucleus from which the European side of Karachi grew. The officers' bungalows in Frere Street formed the front rank of the military quarters, receiving the first of the sea breeze before Civil Lines came into being. Those of the British regiments were at the southern, or station, end, those of the Native regiments, with the Depot and Commissariat, at the other. The Regimental or Sudder Bazaar was between. The barracks were on the wide rocky plain behind the officers' bungalows. Even here all is changed. The "sheds of wattle and daub" and "parallelograms of unlovely regularity" so graphically portrayed, with their inmates, by Sir R. Burton, have to a great extent been superseded by substantial and handsome houses of two stories, the original Napier Barracks have been succeeded by magnificent edifices erected in 1866, and the Sudder Bazaar from being merely a regimental bazaar now supplies the wants of the whole civil station. In and about the Sudder Bazaar there are now many public buildings for example the Empress Market, the Scotch Church, the two Volunteer Halls, the Grammar School, the Goa-Portuguese Hall, etc.

In the northern half of the triangle formed by Frere Street with the Bunder and Kacheri Roads there is a wide, sandy plain, used as a parade ground by the Royal Field Artillery, the lines and the stables of which are located between it and the Sudder Bazaar. The Artillery Mess House which is close to Holy Trinity Church is said to be the oldest building remaining in all this part. Adjoining the artillery lines, on the north, is the Arsenal, which was partly blown up by an explosion in 1858.

The tramway system of Karachi belongs to a Company (the East India Tramway Company) which pays the Municipality a royalty of Rs. 500 a year per mile of line. The system was opened in 1885, and the trams were driven by steam. Subsequently horse traction was substituted, and at a later date motor traction. The lines extend from Kiamari to the Cantonment Railway Station, with one branch via the Napier and Lawrence Roads to the Zoological Gardens and another to Soldiers' bazaar.

The aspect of the surroundings of Karachi is dreary. To the south-east is a flat waste, scarcely above high water mark, intersected by two roads into which the Victoria Road divides after crossing the railway. Of these, one, going almost due south, leads to Clifton, passing on the right a mound of hard conglomerate called Bath Island. Clifton is a plateau or rather, two plateaux, distinguished as old and new Clifton, in the very broken chain of hills of which Manora and the Oyster Rocks are detached links. Here very soon after the British occupation of Sind a few villas were built, to which residents of the cantonment used to go for change of air and sea bathing. The distance from the bazaar and the absence of drinking water has, however, prevented the place from ever becoming a large residential suburb of Karachi, and these deficiencies have not been made good to the present day. All this part of the coast is silting up and the Napier groyne, with the stopping of the Chinna creek, probably increased the deposit of fine sand to the west of Clifton, which, driven by the monsoon wind, forms moving hills that swallow up everything in their way. At one time the very existence of Clifton seemed to be threatened and

the road to it was buried, but the sand has been most successfully combated by an extensive system of low fences, within which a growth of "Goats-foot Creeper" (*Ipomæa pes-capræ*) is induced.

About a mile east of Clifton, on another plateau, was Ghizri Sanitarium, established in 1854 for sick officers and soldiers. There were substantial stone bungalows for the officers and barracks for the soldiers and a detached residence for an Apothecary. The old Gazetteer of Sind pronounces the sanitarium to be admirably suited for its purpose and anticipates the erection of additional barracks to accommodate 400 invalids; but some years ago the sanitarium was abolished and everything removed except the foundation of the buildings.

The name Ghizri belongs properly to the creek east of the sanitarium, formed by the Malir river, which opens into the broad mouth of the Gharo creek and so has connection with the whole net-work of channels intersecting the Delta. This made it an important place at the beginning of the British rule and the remains may still be seen of a line of railway by which heavy material used to be sent from the workshops near Cantonment Station to Ghizri and so, by river-steamers, up the Indus to Kotri. This was when the Kotri-Karachi Line was under construction, but the route had long before that been in use for troops and stores. Ghizri is still a landing place, authorized under the Customs Act, for rice and other produce from the Delta. There is a Customs chowkey on the hill overlooking the creek and also a Municipal duty post.

Nearly north of Ghizri Sanitarium and not three miles from it there is a prominent conical hill with a house on the top known as Honeymoon Lodge. This is said to have been built by the ex-Raja of Satara; but, being assured by the sight of a cobra that the house was unlucky, he sold it to His Highness the Agha Khan to whom it now belongs. On another hill not far off is the Parsi Tower of Silence. A mile and a half further north is a group of higher hills, among which are the Hand's Hill quarries, out of which Karachi has been built.

On the west the old town was bounded by the abrupt banks and flat, sandy bottom of the Lyari river bed. It

is a river for only a few days in the year, after rain, when it comes down in spate with such suddenness sometimes that persons crossing it are carried away. Eleven were drowned one morning in 1906. The Lyari drains the hills north of Karachi, and its left bank, for some miles above the town, is green with gardens and cultivation. Beyond that a barren plain extends to the hills of which Cape Monze, 20 miles away, is the southern extremity. Beyond them the great chain of the Pabb hills, or mountains, bounds the horizon.

The town originally depended for its water supply on wells alone. From the earliest days of the conquest projects were set on

Water Works.

foot for supplying an adequate quantity of good water, but nothing practicable ensued till a scheme was prepared by Mr. Strachan, the Secretary and Engineer of the Municipality, in 1880. His first plans were rejected on account of their cost. He modified them and at last obtained sanction to a scheme estimated to supply 8 gallons of water a day per head of the population and not to cost more than Rs. 8,50,000. The foundation stone of the distributing reservoir (the Temple Reservoir) was laid by Sir Richard Temple, Governor of Bombay, on 18th February 1880, and the works were opened in April 1883. The source of supply was the underground flow of the river Malir, supplied from a reservoir of mountains one hundred miles away. Being porous, the mountains absorb the rain that falls upon them, and discharge it gradually through the subterranean stream-bed. On the right bank of the Malir, but at a distance of a thousand feet from the bank, two wells were sunk, 38 feet in depth and 40 feet in diameter. At about 2 feet from the bottom of each well a pipe, 2 feet in diameter, took off the supply. These met and from their junction a single pipe of the same diameter led to the junction tank, 6,551 feet from the first well. From the tank to the Temple Reservoir the water was carried by a masonry conduit having a section of 3' 3" by 2' 3" for the first 9 miles, with a fall of two feet to the mile, and after that a section of 2' 6" by 2' 3" with a fall of 3' 91 feet to the mile. The conduit was covered, but provided with ventilators. The site of the wells was distant about 16½ miles from Karachi.

and 7 from Landhi Station on the railway and its height above mean sea level was 170 feet: so the water flowed easily to the reservoir, the floor of which was about 52 feet above sea level. As the town is very little above the level of the sea it was expected that there would be a sufficient head of water to supply the upper stories of all the houses. The reservoir was 200 feet in length by 150 in breadth and provided for a water depth of 10 feet. The total cost of the works was Rs. 8,54,973, but a further sum of Rs. 3,15,292 was soon after expended in extensions of the distributing pipes and other additions. In 1895-96 a second reservoir, a little larger than the first, known as the Currie Reservoir was constructed at a cost of Rs. 1,20,000. Before a year had run, however, it was found that the source of supply was not equal to the demand upon it and galleries had to be run out from both wells to catch more water. But the relief afforded was only temporary, and in 1887-88 it was found necessary to bring a conduit from Dumlotte (Damlot) five miles further up, between the Malir and Bazar rivers, as a feeder to the wells. The ten years from 1889 to 1898 were years of good rain, the average being 9½ inches, but with 1898 a period of drought set in and the water supply failed again; and in April 1900 Mr. J. Forrest Brunton, the Chief Officer of the Municipality, proposed to sink another well on the 4th mile of the Dumlotte conduit, from which water might be pumped into the conduit. This was carried out at once at a cost of Rs. 5,523 and afforded immediate relief, but the supply of water had at the same time to be restricted to enforce economy. In 1901 a second well on the Dumlotte Conduit became necessary with a second pump. This cost Rs. 4,358. In the same year Mr. E. F. Dawson, Superintending Engineer, was deputed to investigate the whole question with Mr. Brunton, and in pursuance of his report the Municipality resolved to appropriate Rs. 39,332 for the purpose of sinking a larger well at Dumlotte, 35 feet in diameter and 37 feet deep, to be worked by a 12" centrifugal pump driven by a 16 N. H. P. engine and capable of delivering 2,400 gallons per minute. This superseded the two smaller wells at Dumlotte. The demand on the supply continued to grow yearly, and in time it became necessary to augment not only the supply but also the storage reservoirs. The Temple Reservoir and the Currie Reservoir

have a combined capacity of six million gallons, and in 1913 a new reservoir, known as the Sydenham Reservoir, was constructed to contain another six million gallons. With this addition to the storage capacity it has become possible to meet the fluctuations of the demand, and at the present time the water problem of the town is not particularly acute.

Of the public buildings and places referred to above some are described elsewhere, the schools and colleges for example in connection with Education and hospitals in the chapter on Health. Some remain to be noticed.

The main entrance to Government House is from Victoria Road immediately opposite
 Government House. to the entrance to Holy Trinity Church.

There are five other entrances. The House, which stands in 40 acres of ground, was built by Sir Charles Napier, and was in his time a plain single-storied building. On Sir Charles Napier's retirement it was purchased by Government as a residence for the Commissioner in Sind, and has remained so ever since. General Jacob, when acting as Commissioner in 1858, added the upper story to the central block of the house, doubtless in imitation of the upper storey of his own house at Jacobabad. Since then no big structural alterations have been carried out, though constant improvements are made to modernize the house. In 1906 in anticipation of the visit of Their Royal Highnesses the Prince and Princess of Wales a complete installation of electric light and fans was fitted. A marble tablet on the porch in front of the house records the fact that the House "was built and occupied by Sir Charles Napier, Conqueror and Governor of Sind." The historical character of the house is further emphasized by the possession of portraits of Sir Charles Napier, all the Commissioners, and other distinguished men who have served in Sind, such as Sir James Outram, General Jacob, Sir Henry Green, etc. A small library of interesting and valuable books on the history of Sind was started by a former Commissioner, Sir Evan James.

The Frere Hall is by its situation and character the most notable building in Karachi and would be beautiful but for its incongruous excrescences, an octagonal tower crowned with an iron cage, and an
 Frere Hall and the Queen's and King's Statues.

acute roof spirelet, coated with Muntz's metal. The inception of this Hall was a meeting held to devise means of commemorating the long and brilliant administration of Sir Bartle Frere when he was called to the Viceroy's Council in 1859. A sum of Rs. 22,500 was raised by subscription and designs for a public hall were invited. Out of twelve sent in, one by Lieutenant-Colonel St. Clair Wilson was chosen, and the building was commenced in 1863. It was opened in 1865, though not then quite complete, by Mr. Mansfield, the Commissioner of the day. The total cost of it came to about Rs. 1,80,000, of which Government contributed Rs. 10,000 and the Municipality paid the balance. The Hall is in the Venetian Gothic style and is built of the familiar yellowish Karachi limestone, relieved very effectively by white oolite quarried near Bholari south of Kotri and red and grey sandstones from Jungshahi. The columns and arches of the wide verandahs are exceedingly graceful and the whole detail pleasing, but the tower and spirelet harmonize neither with the body of the building nor with each other. The apex of the spirelet is 144 feet above ground level. From the porch on the east side a double staircase leads up directly to a fine hall in the upper storey, 70 feet long by 35 in width and 38 in height. This is the "Town Hall" of Karachi for public meetings, lectures, balls, concerts and dramatic entertainments. It has wide verandahs on two sides and opens at the north end, by an arch into a second fine room, 63 feet by 25, which can be used to supplement the main hall and accommodate a stage or platform. On the ground floor there is a main hall equal to the one above. The room at the end, corresponding to the second room above, accommodates the Frere Hall Library. The main hall upstairs is adorned with some good busts, among which are two of Their Majesties King Edward VII and Queen Alexandra, presented by Mr. Edulji Dinshaw, C.I.E. There are also oil paintings of Sir Charles Pritchard, Sir Evan James, Mr. R. Giles and Mr. A. D. Young-husband, former Commissioners in Sind.

On the west side of the Hall stands the Queen's Statue in the midst of what is known as 'the Queen's Lawn,' and on the east side is the new Statue of King Edward VIII on the corresponding King's Lawn, the Hall and these two lawns occupying the entire space between Victoria and Bonus roads.

The Queen's Statue, which is by Sir Hamo Thornycroft, R.A., was unveiled by His Royal Highness the Prince of Wales in March 1906. The monument consists of a classically treated architectural pedestal with statues of bronze around the base, and crowned with a colossal white marble Statue of the Queen-Empress, wearing a widow's veil and the imperial crown and robes of state, and holding in her hand the sceptre and the orb. The principal group at the foot of the pedestal represents India approaching Justice and Peace. On one side is a lion, on the other a tiger, with heads erect, guarding the monument. At the rear the river Indus is symbolized by a woman carrying an urn and pouring water on the thirsty soil. The approach to the statue from the Victoria Road is by a broad flight of steps of Carrara marble.

The Statue of King Edward is also by Sir Hamo Thornycroft, R. A., and was unveiled by His Excellency Lord Willingdon, Governor of Bombay, in January 1916. The following description of it is taken from a pamphlet prepared by the Chairman of the Statue Committee at the time of its unveiling :—

"The classically treated architectural pedestal is of white marble standing on a base of grey granite.

"The pedestal is crowned with a colossal white marble Statue of the late King-Emperor Edward VII wearing the coronation robes of the King of England, and holding in his hands the sceptre and the orb : upon the orb stands a winged figure of Victory in white marble.

"The group in bronze at the feet of the pedestal represents Britannia with the helmet, shield and trident, wreathed with leaves and protecting an Indian child.

"The group in bronze at the back of the statue represents 'Peace,' a winged female figure bending slightly over an Indian child.

"On the right hand stands a bronze figure of heroic size, representing a British soldier of the York and Lancaster Regiment standing at ease, his rifle with fixed bayonet in his hands.

"On the left hand side of the statue stands a similar figure of an Indian soldier of the 129th D. C. O. Bahuchis."

This hall, which is situated on the Bunder Road, was erected in 1886 to honour the memory of a citizen who had been prominent in many ways and occupied the chair of the Chamber of Commerce in 1870-71. The sum of Rs. 9,000 having been subscribed by his friends, the Municipality gave a site and supplied the additional funds necessary to provide that part of the town with a public hall, reading room and library. The design was prepared by Mr. J. Strachan. The style is Venetian Gothic. The upper storey consists mainly of one hall, 60 feet by 30, intended to seat 500 people. The ground floor contains an entrance hall, library, reading room and some small rooms. On the east front there is an illuminated clock, the gift of Rao Sahib Ramdas Morarji.

The Ghulam Hussein Khalikdina Hall, also on the Bunder Road, was the result of a coalition between the executors of the late Mr. Ghulam Hussein Khalikdina, who had left by will Rs. 18,000 to be spent on some useful public object, the Committee of the Native General Library, who were badly in need of new premises, and the Municipality. The Municipality added Rs. 15,000 to the bequest and the hall was erected and opened in 1906. It consists of one spacious hall for public meetings and two rooms flanking the entrance, which are, according to agreement, placed at the disposal of the Committee of the Native General Library. The hall is 70 feet in length by 45 in width and 30 in height and is capable of seating from 600 to 700 persons. The front portico has an area of 52½ feet by 32½ and a ten-foot verandah runs round the sides of the hall. The building belongs to, and is maintained by, the Municipality.

Other large halls available for public meetings are the Volunteer Hall, Goa-Portuguese Hall in Frere Street just beyond the Grammar School, and those of the Sind Volunteer Rifles and the Karachi Artillery Volunteers, the former at the junction of Elphinstone Street with Bunder Road and the latter on Victoria Road opposite the Scotch Church. The first named hall belongs to the Goa-Portuguese Association and has taken the place of an earlier hall,

the proceeds of which helped towards the building of it. The balance of the money required was raised by the Association from its own resources. The total was Rs. 56,000, of which Rs. 8,000 were paid for the site. The building which was designed by Mr. M. Somake, a local architect, is arranged on almost the same plan as the Frere Hall, and the dimensions of its rooms are nearly the same.

The Sind Club occupies a conspicuous position in Victoria Road to the north side of the Frere Hall. It was originally housed in a small bungalow in Elphinstone Street, but in 1883 was removed to its present premises. The main building was built entirely of light limestone in the Italian style. A second building comprising a two-storied block of chambers was erected in 1888. In 1892 four chambers were built over the smoking room. In 1904 the third block was increased and finally on the acquisition of the site of the Masonic Lodge adjacent to it a new block containing 9 sets of chambers was erected in 1915. The club contains the usual accommodation and arrangements, and there is in the compound a racket court.

The gymkhana is in Scandal Point Road, and has occupied its present buildings (with subsequent enlargements) since 1886. It is the lineal descendant of the meeting place near the rifle range where the European population of Karachi used to meet in the early days of the conquest and which received the name of Scandal Point. The road leading to it is also known as Scandal Point Road.

There are numerous other clubs and similar institutions in Karachi, the principal being the Karachi Club in Kacheri Road, the Parsi Gymkhana, the Railway Institute and the Karachi Artillery Volunteer Club.

The original Masonic Hall stood on a site to the north of and adjacent to the Sind Club. A few years ago by an arrangement between the lodge and the club the site was resumed by Government and made over to the club on lease for an extension of its premises. The lodge was in exchange granted a site between

Government House and the Artillery Lines, and a new temple was erected at a cost of Rs. 60,000 and consecrated in 1914. The original lodge in Karachi is Lodge Hope, founded in 1842. There are at the present time eight other lodges, all of which hold regular meetings.

To the west of the new lodge stand the buildings of the local branch of the Y.M.C.A. The branch was founded in 1905, and carried on its work in hired premises until 1914, when its permanent buildings were erected. Standing in an excellent site they have cost Rs. 67,500, met partly by subscriptions from Karachi and abroad, partly by a Government grant, and partly by a grant from the National Council. The buildings contain general rooms and a gymnasium on the ground floor and hostel accommodation for eighteen persons upstairs. There are five acres of land for games, etc., surrounding them.

Holy Trinity Church, the first Protestant church built in Sind, stands in a compound of 15 acres between Victoria Road and Elphinstone Street and opposite the main entrance to Government House. It was one of the first works set on foot by Mr. (Sir Bartle) Frere after his arrival in Sind and he laid the foundation stone on 9th September 1852. It is recorded that the clergy, the Reverends W. K. Fletcher and W. Carr, met the Commissioner at the entrance to the church square. The Senior Chaplain, then in the name of the community, requested the Commissioner to lay the stone. On his assent being received prayers were recited and the Junior Chaplain then proceeded to read the inscription on the foundation stone. The names of the coins to be deposited in the stone were then read out, after which the stone was duly laid by Mr. Frere in the name of the Holy Trinity. The doxology followed, then a royal salute and the national anthem, after which the Senior Chaplain pronounced the benediction.

The church was consecrated in March 1855 by the Bishop of Bombay. The cost of the building was Rs. 53,554 without the furnishings which amounted to about Rs. 10,700 and the two bells which cost Rs. 1,550. The organ was not provided until 1894; the cost of it (Rs. 7,000)

was met by private subscriptions. The present clock was also paid for by public subscription in 1906.

The church was designed by Captain John Hill of the Bombay Engineers. Sir Richard Burton compares it to a hammer with the handle turned heavenwards, and the author of "Kurrachee, Past, Present and Future" finds in it the form of a giraffe, an animal distinguished for its exceedingly long neck and the shortness of its back. The tower of the church is (or was) 150 feet high and the nave only 115 feet long. There is a popular story that the tower was intended to serve as a landmark for vessels approaching the shore, for which there does not appear to be any foundation excepting the difficulty of accounting for it in any other way. In 1904 the two uppermost of the six storeys of which it consisted were removed for reasons of safety, and this somewhat improved the whole structure architecturally. The church is not oriented, but lies north-west to south-east, probably to catch the prevailing breeze. There are 800 sittings, all free, but allotted at parade service. There was an interesting memorial window to Sir Charles Napier high up in the east wall (see page 145, "A" Volume) but it was blown to pieces by the cyclone of 1902. Another window, erected in 1881, by Mr. F. D. Melville, Commissioner in Sind, to the memory of his wife, survived the storm. There are numerous brasses, of which one, dedicated to the memory of three children of Captain Minter in 1842, must have been affixed originally in the old bungalow to which Sir Charles Napier referred as "an ecclesiastical convenience" long before the church was built. Seven in a group commemorate officers of the 129th Baluchis and linked battalions and are surmounted by old regimental colours. In front of the church stands a simple column erected in 1849 by Sir Charles Napier, then Commander-in-Chief of the Indian Army, and officers, non-commissioned officers and privates of H. M.'s 22nd Regiment, "to their fellow-soldiers who died from the effects of climate during their first tour of service in Sind in 1842-43." This originally stood in the grounds of Government House, but was removed some years ago.

To the north-east of the church, a bungalow for the chaplain has recently been built by Government. South-

east of the church stands the Howard Institute, founded by the Reverend A. B. Howard, but not finished until after his death. His portrait hangs in it and there is a brass tablet to his memory in the church. The institute contains a library and refreshment, billiard and reading rooms, besides a hall for meetings and entertainments, the cost of building which (Rs. 10,000 in all) was entirely raised by private effort. The institute is intended for the parishioners and members of the church and is much used by the soldiers in garrison.

This is a one-storeyed bungalow in Victoria Road for the residence of widows and is in the charge of the chaplain. Four widows receive Rs. 15 per mensem, two others Rs. 5, and a Government grant of Rs. 17 is made towards the maintenance of a military widow. Apart from these grants the home is entirely supported by voluntary contributions.

The Scotch Church (St. Andrew's) is also between Victoria Road and Elphinstone Street, but more than half a mile north of Holy Trinity Church. It is close to the traffic of Sadar Bazaar, but effectually secluded by its well-wooded garden of 2 acres from which its graceful spire, rising to a height of 135 feet, commands attention from a great distance. This is a very pleasing building, designed by Mr. T. G. Newnham of the Sind Railway in the Gothic style of the 14th century. It consists of a nave, 100 feet long 58 feet wide and 56 feet high to the ridge of roof, which is separated from the aisles by arcades, above which are clerestory windows, ten on each side. There is a fine rose-window, 18 feet in diameter, at the south end, and a five-light window, with a head of geometrical tracery, on the opposite side. The church is entered by an octagonal porch at the south corner, near which is the tower and steeple. It is planned to accommodate 400 worshippers. The cost of the building was Rs. 50,300, of which Government contributed Rs. 25,000. The foundation stone of this church was laid on 6th February 1867 by Sir Robert Napier, K.C.B., Commander-in-Chief of the Bombay Army, and it was opened for divine service on the last day of 1868 though it was not dedicated until 1869.

Further on and upon the opposite side of Elphinstone Street is the American Methodist Episcopal Chapel, an unpretentious building, erected in 1875 and capable of seating 200 persons.

Methodist Church.

The Roman Catholic Church is one of a group of substantial buildings which attest the importance of the Roman Catholic Community of Karachi. They are situated in the plain east of the Sadar Bazaar and north of the Napier barracks, embowered in a large and shady garden, which hides them from view to some extent; but the broad front of the church, with its two corner spires, stands out and commands attention. The place has some historical interest. Close to the south compound wall, and adjoining the old cemetery, described below, was built, in 1845, St. Patrick's Church, the first Christian Church in Sind, with the exception of the one mentioned in the article on Tatta, of which nothing is known. This little church has long disappeared and the site of it is now occupied by a play-ground for the girls of the Convent School; but three memorials of it are carefully preserved. The first is a brass tablet inscribed as follows:—

Roman Catholic Church.

"This Church, dedicated to St. Patrick and the first Christian temple in Pagan Scinde, was erected Anno Domini 1845, by subscriptions and donations from the Roman Catholic Officers, non-commissioned officers and soldiers, departments, classes and individuals, aided by the donations of many of our Protestant brethren.

"The Reverend Francis Casabosch, Chaplain.

"Be it known unto all men. That all right to, and property in, and belonging to this Church, is vested in, and is hereby given unto the Reverend Francis Casabosch, Roman Catholic Chaplain (in trust for the use of all Christians) and his successors in communion with the Holy Roman Catholic Church, but under the control of the Bishop of Bombay, until such time as a Roman Catholic Bishop shall be appointed for this portion of the British Empire, and no

longer; but this Church is never to be given over in any manner whatsoever to Government.

Committee ..	{	The Rev. F. Casabosch, Chaplain.
		Major J. Creagh, H. M.'s 86th Regiment.
Collector and Treasurer.	{	Assistant Surgeon J. Coghlan, H. M.'s 8th Regiment.
		Color-Sergt. W. Smith, H. M.'s 86th Regiment.
		H. C. Johns, Engraver, etc., Chatham, England."

Another brass tablet contains an engraved balance sheet of the building expenses, in which His Excellency the Governor of Sind and staff appear as contributors of Rs. 180. The total expenditure was only Rs. 5,930-11-2.

The third memorial is a small marble tablet to the memory of the Reverend F. Andrew, "discalced Carmelite," who died in 1860.

In 1881 the little church was superseded by the present one, but continued to be used as a school till it was wrecked by a storm in 1885. The new church, which was designed and constructed by three members of the Society of Jesus, Father Wagner, Brother Kluver and Brother Lau, was opened in April 1881. It is in the Gothic style and measures 170 feet by 75, and is calculated to accommodate 1,500 worshippers. Its exterior is not ornamental, though striking from a distance, but money and art have been lavished on the interior. The ceilings of both nave and aisles consist of ground vaults, and the vault of the nave is carried in one stretch from the portal, through the transept, to the peak of the apsis, an arrangement which enhances the impression of height and length. The chancel, itself spacious, acquires a special impressiveness by its additional height, while the noble contours of the aspiring altar are seen to the best advantage. The whole interior is painted in oil and the windows are all of stained glass, the gifts of members of the congregation. The central passage and the sanctuary are paved with marble. There is a number of life-size statues of some artistic merit, and a series of "Stations of the Cross" adorn the walls.

The other buildings in the compound are a parochial hall, the residence of the parish priests and their associates engaged in St. Patrick's School; and a group of five contiguous buildings which constitute the Convent School, described under "Education." The latter are substantial and built for comfort rather than effect, but would have been effective if their arrangement had not been somewhat cramped by want of space. They consist of a central towered block with two wings and two additional flanking wings. In the southern of these is the Convent Chapel, which is wholly paved with marble and decorated as richly as the church. St. Patrick's School, the last building of the group, is outside the compound and separated from the rest by the road that leads to the Parsi Gyrkhana.

There are no private markets in Karachi, but eight municipal ones. The chief one is the **Empress Market** on the **Preedy Road** in the **Sadar Bazaar**, which was opened in March 1891. The foundation stone of it had been laid by Sir James Fergusson nearly seven years before, but the work lagged for want of funds. The building, which was designed by Mr. J. Strachan in the Domestic Gothic style, consists of four galleries, 46 feet wide, surrounding an open courtyard of 130 feet by 100. In the front rises a massive tower 140 feet high, in which is a chiming clock with four iron skeleton dials, each 6 feet in diameter. The market contains 280 stalls for the sale of meat, vegetables, fruit, flowers and all things else suitable for an Eastern market, save fish, which is accommodated outside. The cost of the market was Rs. 1,55,213.

The **Boulton Market**, which replaced an old one on the same site, stands on the left of the **Bunder Road**. It was named in honour of Colonel Boulton, Collector of Karachi and at that time President of the Municipality. It was designed by Mr. Strachan and was at first 160 feet in length by 80 feet in width and contained 62 stalls for fruit and vegetables. In 1886-87 it was largely extended to provide accommodation for butchers and fishmongers. Its total cost has been Rs. 42,658.

The other markets are the **Lambert Market**, a neat little dovecote at the meeting of five roads not far from the

Sind College, the Lyari Market on the left bank of the Lyari the Khudda Fish Market, about half a mile on the other side, where a great traffic in fresh-caught fish is carried on, and three others interesting to their own vicinities.

The Victoria Museum is undoubtedly the representative, in direct descent, of the Museum and Library started by Sir Charles Napier to promote the investigation of the history and antiquities of Sind. It subsequently was amalgamated with a public library inaugurated by Sir Bartle Frere in 1852, now the Frere Hall Library. The two were one institution and were at first accommodated in a room of the Ladies' Club and afterwards in the Frere Hall, in which they remained until 1892. It had before then been decided to separate the Museum and provide it with a worthy building. Mr. J. Strachan designed a building, the foundation stone of which was laid in the Burns Garden by His Royal Highness the Duke of Connaught in 1886-87, but as it soon became apparent that the funds available for this and for the Sind College, at that time being designed, would not suffice for two structures of adequate dignity, an economy without sacrifice of effect was achieved by amalgamating them and making the Museum a wing of the College. It consists of a main hall, 53½ by 34½ feet, with a gallery supported on ornamental iron pillars, and ten smaller rooms, affording 3,723 square feet of floor space. The front verandah, hall and one side room have floors of mosaic tiles. The Victoria Museum was formally opened by Sir Evan James, together with the College building, on 21st May 1892.

When the Museum was transferred to its present building, its control passed to the Municipality, and the results have been to some extent unfortunate, as the collection was for some time neglected with the results that many valuable exhibits have been lost or cannot now be properly identified. There is nevertheless much that is of value in the Museum.

The most important of the public gardens is the Municipal garden commonly known as the Zoological Garden between the old Commissariat Stores and the

Gardens.

Lyari. It was originally one of the Government gardens which were initiated almost immediately after the British occupation for the purpose primarily of supplying the troops with fresh vegetables. A sum of Rs. 100 a month was at first allowed for its support, but in 1847 Major W. Blenkins, Assistant Commissary-General and Superintendent of Gardens, was able to report that he had discontinued drawing that for two years and during that period had made a profit for Government of Rs. 17,032. This was by the issue of vegetables to the troops and fodder to Government cattle, the sale of vegetables and forage to private persons and the supply of pigeons, rabbits and leeches to the hospital. He appended three medical certificates to the effect that the leeches bred by Major Blenkins were infinitely superior to those formerly obtained by contract. The garden at that time measured 43 acres and contained 15 wells. Sometime after the formation of the Karachi Municipality the garden was handed over to its care. Afterwards it was laid out on a new plan by the late Mr. H. M. Birdwood. He was associated in this work with Mr. Finch, Director of the Indo-European Telegraph, and Mr. Strachan, and they proceeded, with the help of district officers and native gentlemen in all parts of the province, to form the nucleus of a collection of wild animals. The sandy soil and the climate appear to be favourable to the health of these, which have thriven and in many cases bred and multiplied so that the Karachi Zoological Garden has a reputation quite out of proportion to its size and character. Vegetables and fruits of many kinds are grown in this garden and it contains a large vineyard which produces excellent grapes. The original alps were obtained from California by Sir E. James, a former Commissioner.

South of the Zoological Garden is a shady *bagh*, full of old trees, commonly known as the Merewether Garden or the Commissioner's Garden. It belongs to a bungalow which was purchased by Government in 1869 for the ex-Rani of Satara and afterwards used as a residence for Chima Saheb, brother of a former Raja of Kolhapur. After Chima Saheb's death it was reserved as a guest-house for the accommodation of the Mirs of Sind. Some years ago, at a lecture

by Mr. H. M. Birdwood, read before the Society of Arts, Sir W. Lee-Warner made an amusing reference to this garden and took to himself some credit for saving it when he was a member of the Finance Committee appointed by Government to cut down redundant expenditure. One of the members was drawing his pen through a curious item in the expenditure of Sind, which no one could explain, on account of "Mrs. Gordon's Establishment." Sir W. Lee-Warner having been in Sind looked into the matter and found that the name was only a Bengali printer's version of Mrs' Garden Establishment. The garden is maintained still, though the bungalow collapsed a few years ago, and up to the present has not been rebuilt.

The Burns Garden, on the Kacheri Road and separated from the Sind College by the Burns Road, is the memorial of a gentleman of whom history has kept no other record. He is commonly spoken of as Dr. Burns. The garden covers an area of 26·20 acres and is intersected by walks shaded by well-grown trees, with flower beds and vegetable pots between. There is also a vinery.

There are several minor municipal gardens.

The old burial grounds contain some of the most authentic records of the history of Karachi. The oldest is the one already alluded to, on the left hand of the Bunder Road, between it and the Preedy Tank. This is the oldest European cemetery in Sind and belongs to the time when the reserve force was encamped near the old town of Karachi before the conquest. Here is the grave of Captain Hand of the 2nd Grenadier Regiment, B. N. I., who was "barbarously murdered by a gang of Sindhians, 1839." The family annals of Seth Naomal tell the story of this unfortunate young officer's end. He went out from the camp one day for a ride in the direction of Mugger Peer, but did not return. Search was made and his body found in a hollow of the hills. Colonel Spiller, the officer in command of the small force, at once applied to Seth Naomal, who sent out *puggees* and traced the murder to Khalifa Chakur, a notorious religious leader of Shah Bilawal, and some of his followers, whose cupidity had been excited by the gold

braided on the Captain's coat. Through the Political Agent at Hyderabad Mir Nur Muhammad was induced to arrest Khalifa Chakur and send him to Karachi. He was tried by a military court and hanged at the scene of the murder, which possibly gave its name to Hand's Hill, about 2 miles north-east of the Napier barracks.

Immediately after the conquest a new cemetery was opened close to the south boundary of the Convent School's compound. Here is the grave of Captain John Moore Napier, nephew and Military Secretary of the conqueror, who died of cholera on 7th July 1846, and of his infant daughter Sarah who preceded him by three days. Other memorials of that awful time are not wanting. One conspicuous monument is to the memory of 10 corporals, 1 drummer, 263 privates, 35 women and 66 children, 86th Royal Regiment. Of this number 261 died of cholera in June and July 1846. Twenty-three sergeants of the same corps, of whom 19 fell victims in the same fatal months, have a separate monument. The latest tomb in the cemetery is dated 1854, though the Barrat family vault appears to have been re-opened for a burial in 1850.

The next burying ground apparently was the small one, about half a mile to the north of the one at present in use, containing only 16 graves. The few inscriptions which are still legible belong to the years 1852-53. This was succeeded by the cemetery now in use on the Tatta Road, which water and care have converted into an oasis of greenness and shade in the midst of a stony plain.

The Port of Karachi is distant from Bombay 483 miles, from Aden 1,437 and from London via the Suez Canal 6,077, being nearer to Europe than Bombay by 200 miles. From Basrah in the Persian Gulf its distance is 1,107 miles or less than that of Bombay by 470 miles. It is regularly served by two lines of coasting steamers—those of the British India Steam Navigation Co., which ply between Bombay and the Gulf Ports, calling at Karachi two or three times a week each way, and carry His Majesty's Mails, and those of the Bombay Steam Navigation Co. (Shepherd & Co.), whilst the passenger steamers of the City, Hall, Ellerman and Wilson lines use

the port regularly. The position of Karachi and the facilities which the port affords for the embarkation of troops have rendered it a place of considerable military importance during the war.

The harbour, as it was before the British occupation of Sind, consisted of a great lagoon, or backwater, which at high water spring tides covered an area of 18 square miles of creek and mangroove swamp and mud flat. It had two inlets, separated by the long, low island of Kiamari. The eastern inlet was the Chinna creek, now closed: the western being protected from the southwest monsoon by the rocky headland of "Ras Munhora" and from hostile fleets by the stone fort and round tower built thereon by the Mirs in 1797. Being partly closed by a long bar, or sand-bank, it afforded a safe and spacious anchorage for vessels not drawing more than 15 or 16 feet. These lay at anchor in deep water off Kiamari, and discharged their cargoes and passengers into *doondies*, by which they were conveyed at high water up a narrow channel which penetrated the mud flat in front of the town, and so landed on a small patch of rising ground "besides a white mosque built close to the Custom House," as reported by Commander T. G. Carless of the Indian Navy.

When the British came into possession of Karachi, its supreme importance as "the key of Sind and of the Indus," was apprehended at once, and the attention which was then directed to the great question of improving the port has scarcely suffered interruption in the seventy years that have followed. It is only possible here to enumerate the principal measures which have been carried out.

In 1859 the Napier Mole, projected by Sir Charles Napier, was completed and Kiamari connected with the mainland.

In 1858, Mr. Walker, C. E., to whom the whole subject had been referred by the East India Company in consequence of the earnest representations of Mr. (afterwards Sir) Bartle Frere, proposed a marvellously far-seeing and comprehensive scheme, embracing six urgent works, estimated to cost £260,000, and three others of less certain necessity. Five of these were sanctioned in 1860, and

though afterwards interrupted for some years were all eventually carried out, namely :—

- (1) Kiamari Groyne, running southwards from Kiamari for a distance of 7,400 feet (extended afterwards to 8,300 feet).
- (2) Stoppage of Chinna Creek.
- (3) Napier Mole Bridge (over a passage 1,200 feet long to be cut through the mole).
- (4) New Channel (which now conducts the flow of the Chinna Creek under the bridge and past the Native Jetty, so that, on the ebb, it joins up the waters of the western backwater, the whole tidal volume being thus concentrated and passing out through the harbour entrance).
- (5) Native Jetty.—The object of the first four works were in Mr. Walker's own words,

“to prevent the ebbing tide from spreading and wasting its force until it has carried the sand of the bar into deeper water ;

secondly, to give the water that passes through the entrance to the harbour at each ebbing and flowing tides its right direction ;

thirdly, to increase the quantity of water that passes through the entrance ;

fourthly, to shut off the heavy southerly and south-westerly seas from the mouth of the harbour.”

These objects were attained in a remarkable degree and the bar began to move outwards, while the depth of water over it increased. The sixth of Mr. Walker's proposed works, the Manora Breakwater, projecting from the headland for 1,500 feet and terminating in five fathoms, was begun in 1869 and completed in 1873. In 1877 to supplement the effect of these works Government sanctioned a grant of one lakh of rupees annually for ten years, to be spent on dredging.

In 1880 the Harbour Board was constituted, and the Merewether Ship Pier was completed in 1882. In 1886 the affairs of the Port were taken over by a Port Trust, and this body found itself in possession of the following

facilities for accommodating steamers up to 3,000 tons burden :—

- (1) Anchorage for 3 ocean-going steamers.
- (2) Moorings, fixed and swinging, for 8 ocean-going steamers.
- (3) The Merewether Pier accommodating one large ocean-going steamer.
- (4) A wharf, the Napier Mole Boat Wharf, 680 feet long, for the accommodation of the country craft trade.

The construction of a wharfrage line, about 2,000 feet long for the accommodation of 5 ocean-going steamers, had just been commenced.

During the thirty years that have elapsed since the formation of the Trust, the harbour has been so improved that any vessel that can pass through the Suez Canal can enter into it. The following works now exist on the eastern side of the Ship Channel commencing from the south end where the eastern groyne constructed in 1863 and 1865 springs from the main land :—

- (1) Bulk Oil Pier at which liquid fuel, oil and petroleum is discharged by pipes direct into the installations of the Standard Oil Co., New York Burmah Oil Co., Asiatic Petroleum Co., Tank Storage Co., Ltd., and Anglo-Saxon Petroleum Co., Ltd., and by drums and tins into railway waggons. This pier was built in 1909.
- (2) Boat Basin, 11 acres in extent, for landing and embarking passengers and goods, etc., from and on vessels in the stream, with railway service and hydraulic cranes, built in 1911.
- (3) Return Wharf, 325 feet long, for coasting steamers served by railway and hydraulic cranes, built in 1912.
- (4) Continuous line of wharfrage, 8,000 feet in length, completely served by railway, with 87 hydraulic cranes of 35 cwt., one of 30 tons, one of 14 tons.

This wharfage line is divided as follows :—

- (a) "Merewether" Wharf, 4 ship berths (this was built in 1909 and the old Merewether Pier was removed when this straight line of wharf was constructed).
- (b) "Erskine" Wharf, 3 ship berths. Part of the old Erskine Wharf, built in 1888, was removed when the line of wharf was straightened in 1908.
- (c) "James" Wharf, 3 ship berths, built in 1895.
- (d) "Younghusband" Wharf, 4 ship berths, built in 1907-10.
- (e) "Giles" Wharf, 3 ship berths, built in 1906-07.

These wharves are named after former Commissioners in Sind.

- (5) Heavy Lift Pier, one 14-ton crane (for use in connection with a 30-ton floating crane), built in 1914.
- (6) Napier Mole Boat Wharf, 1,824 feet in length, for country craft trade. The original length was 680 feet as before mentioned; 1,000 feet were added in 1907-09 and 192 feet in 1915, a length of 48 feet was cut off in 1910 owing to the building of the new railway bridge across the Chinna Creek.

There are thus 17 ship berths in line at which vessels can lie, discharge and load with the greatest ease and rapidity, and two other ship berths well suited for the purposes they serve.

There are also 20 moorings in the stream for ocean-going steamers and ample anchorage for innumerable country craft.

In the year 1909 the Trust installed in the Manora Light House a new flash light of great power at a cost of Rs. 1,15,948 in place of the old low power fixed light which they inherited from the Harbour Board. In the year 1914 Government installed a flash light in a new light house at Cape Monze, distant 20 miles, west of Karachi, and a light-ship has since been provided by Government for the mouths of the Indus, south-east of Karachi, which, however, owing

to the war has not yet been used and lies at anchor in the harbour. The safe approach to the Port in normal times has thus been amply provided for.

At the north of the Ship Channel is the Native Jetty with warehouses used by vessels discharging and loading in the stream, etc. This was built before the Port Trust was constituted, but has been largely improved and additional warehouses built in the present century.

The Trust in 1909 purchased an area of 177 acres, mostly tidal swamp, from the Karachi Municipality, which they reclaimed and constituted a Produce Yard, known as the "Thole" yard. They have also since 1909 reclaimed an area of 61 acres and constituted thereon the "Mansfield" Import Yard named after a former Commissioner in Sind, complete with ample ranges of warehouses for import cargo on the Karachi side of the Chinna Creek.

They have also since the beginning of the century reclaimed about 115 acres of land between Kiamari and the Chinna Creek, thus enormously enlarging their Kiamari Railway and Produce Yards which have been reconstructed with a view to the convenience of merchants and rapidity of working.

This reclamation has also completely consolidated the area between the Chinna Creek Bridge and Kiamari to the north of the Napier Mole Road.

The following figures relating to financial years (1st April to 31st March and for every fifth year) show how the revenue and expenditure have progressed:—

Year.	Revenue.	Expenditure.
	Rs.	Rs.
1887-88	4,63,696	5,11,137
1892-93	6,46,573	8,34,020
1897-98	9,03,922	8,97,841
1902-03	15,54,918	12,97,796
1907-08	32,04,986	26,45,278
1912-13	46,67,661	38,51,615
1916-17	46,66,847	39,93,710

The highest revenue reached was in 1913-14, the year before the war broke out, when it was nearly Rs. 50,00,000. It will thus be seen that in thirty years the revenue has increased to ten times as much as when the Port Trust was constituted and that the heavy increases began after 1902-03.

The value of the trade of the Port for corresponding years is as follows:—

Year.	Import.	Export.	Total.
	Rs.	Rs.	Rs.
1887-88	6,18,61,331	4,08,16,877	10,26,78,208
1892-93	7,00,13,198	5,56,48,339	12,56,61,537
1897-98	8,71,07,380	7,27,20,313	15,98,27,693
1902-03	11,59,81,484	10,42,05,235	22,01,86,719
1907-18	21,66,01,881	11,14,26,339	32,80,28,220
1912-13	24,90,48,370	37,02,12,715	61,92,61,084
1916-17	20,85,97,022	28,70,92,354	49,56,89,376

The falling off in the year 1916-17 is due to the great reduction of trade owing to war conditions.

In the earlier years of the Port debt was incurred by loans from Government. These were inherited by the Port Trust Board from the Harbour Board and at present only amount to Rs. 4,63,537.

The complete figures are as on 1st April of each year:—

Year.	Outstanding debt.
	Rs.
1887-88	11,08,887
1892-93	24,67,641
1897-98	43,99,760
1902-03	53,77,564
1907-08	81,44,447
1912-13	1,95,68,332
1916-17	2,61,21,949

The Board since the year 1887 have raised loans in the open market under the Local Authorities Loans Act and later under their own Act as since amended. The repayment at maturity of all loans is fully provided for by Sinking Funds which are maintained under Government audit.

The position of the Trust financially is very strong as with a comparatively small debt they own an immensely valuable property in land and material and have established a Reserve Fund in case of need which stood at the following figures for the years given on 1st April :—

Year.	Reserve Fund.
	Ra.
1887-88	Nil.
1892-93	Nil.
1897-98	2,00,000
1902-03	1,69,000
1907-08	15,00,000
1912-13	22,25,474
1916-17	40,47,695

But for the interruption of the war, a very important extension of the harbour works, estimated to cost Rs. 272 lakhs, would now have been in progress. This is known as the " West Wharfrage Scheme " and provides for the present construction of six and later on, as required, of ten more ship berths on the western side of the Ship Channel. So far work has progressed only to the extent of obtaining a very powerful suction dredger costing with pipe line about £96,200 and the reclamation by means thereof of a portion of the site required.

This scheme which has been approved by Government includes the widening and deepening of the Ship Channel from its present width of 600 feet to 1,200 feet and to a depth taking vessels drawing up to 32 feet at any state of the tide while the ship berths will allow vessels alongside with that draught. The provision of a graving dock capable of accommodating the largest vessels visiting Eastern waters is also contemplated and separate proposals for the further improvement of the harbour entrance involving the purchase of a rock breaker, etc., have been put forward and approved.

The Port Trust at the present time is composed of a Chairman appointed by Government and ten Trustees nominated by the Commissioner in Sind as the local Government, and various local bodies.

Keti Bandar ($24^{\circ} 8'$ north latitude, $67^{\circ} 30'$ east longitude) is the headquarter town of the

Keti Bandar.

Keti Bandar Mahal and is the chief town in the taluka of Ghorabari. It is a municipal town with a population of 1,734. It is administered by a Mahalkari and contains the Mahalkari's Office, Customs House, Police Station, Vernacular School, Post Office and Dispensary. Keti is a place of very recent origin. When Commander Carless, I. N., surveyed the Delta of the Indus in 1837, he found Vikkur Bandar next in importance to Karachi, but it was not a town, only a landing place for Baree Gora (Ghorabari), which had acquired commercial importance when the old ports of Dharaja and Shabbandar were forsaken by the ever-changing river and the Hajamro became almost the only route by which vessels of any size could pass up. Even at that time vessels drawing more than 7 feet could not get up as high as Vikkur. About ten years later Vikkur became inaccessible and trade removed to Keti, apparently the name of a small village, which then existed. The name has remained, but the site of the Bandar has changed, the first site having been submerged about 1854. Even the present site is very insecure and much of the town has been eroded during the last twelve years. The Ochito is now the main stream, the river having forced its way down it, but at any time it may follow the channel of the Haidari. Keti is of importance now less as an entrance for merchandise seeking the upper parts than as an outlet for the produce of the surrounding country. The total value of the trade for the last five years is shown below:—

Imports.

	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.
	Rs.	Rs.	Rs.	Rs.	Rs.
Merchandise ..	1,74,856	1,61,000	1,28,347	1,22,600	1,30,000
Treasure ..	8,117	3,450	22,741	21,121	29,540
Total ..	1,82,973	1,64,450	1,51,088	1,43,721	1,59,540

The imports consist almost entirely of miscellaneous goods from Karachi.

Exports.

	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.
	Rs.	Rs.	Rs.	Rs.	Rs.
Merchandise	6,91,123	7,17,892	5,53,932	4,44,308	6,41,200
Treasure			Nil.		

The great article of export is rice, much of which is sent to Cutch and Kathiawar. The duty realized on this is shown below :—

1911-12.	1912-13.	1913-14.	1914-15.	1915-16.
Rs.	Rs.	Rs.	Rs.	Rs.
20,831	16,660	12,082	14,767	12,779

There is a substantial Customs House with quarters for the staff, which consists of an officer in charge and three clerks. Ketri is also the headquarters of two Sea Coast Inspectors of the Customs Department who patrol the creeks in boats.

Kotri, a large town (25° 22' north latitude, 68° 22' east longitude) is the headquarter station of the Kotri Taluka. It has a Municipality, and a population of 7,256. There are in the town the Mukhtiyarkar's Office, Assistant Collector's bungalow, Police Station, Railway Hospital, Library, *musafirkhana*, combined Post and Telegraph Office, Anglo-vernacular School, 2 European Schools, and a Distillery, the only one of its kind in Sind, used for the distillation of the country liquor commonly sold in the bazaars.* There is also a small church (Christ Church) with seats for 100, which contains a font given by Mrs. (Lady) Frere in 1854 and the Ten Commandments executed in Hala pottery and several memorial tablets. This church was consecrated in 1855 and thoroughly renovated in 1887. Kotri is situated on the right bank of the Indus and since 1900 has been connected with Gidu Bandar on the other side of the river

* See "A" Volume, page 421.

by a iron bridge replacing the steam ferry which used to ply between these two places. The town has excellent road communications; to Karachi there are two road routes—one by Thano Bula Khan, and the other via Jerruck, Tatta, Gharo and Landhi, 117 miles. A road also goes to Band Virah, distant 24 miles. Much of the traffic by river has ceased since the construction of the railway. Kotri is quite a modern place. It owed its first importance to the rise of Hyderabad on the other side of the river and to the roads from Sehwan, Karachi and the Delta meeting here. It greatly increased when it became the terminus of the Karachi Kotri Railway and the starting point of the river steamers for Sukkur and Multan. The old Gazetteer describes the animated appearance of the river bank "with the Flotilla steamers, their barges and numerous native boats moored close to the shore, all either discharging or taking in cargo." There were miles of sidings on the banks of the river to facilitate the transfer of cargo. The remains of the old flotilla and other vestiges of that prosperous time may still be seen, though the only steamer of that period which now survives and is in use is the Commissioner in Sind's "Jhelum" and its attendant flat the "Multan." After Kotri was directly connected with Sukkur by a line on the right bank of the Indus it sank into comparative insignificance. The population in 1872 was 7,949, of whom 304 were Christians; in 1901 the population was only 7,617 with 259 Christians, while in 1911 it was 7,256 with 45 Christians. Kotri was at times exposed to serious peril from floods in the Baran river, which falls into the Indus four miles south of it. Deep drains were cut north of the town and embankments raised to the west of it with good results. In August 1914 owing to the phenomenal height of the river the town was all but submerged. Drainage and sanitation appears also to have improved the health of the town.

Kotri Allahrakho Shah (24° 24' north latitude, 67° 52' east longitude) is the head-quarter station of Ghorabari Taluka and is close to the river. It is a village of no importance, but conveniently situated for administrative purposes. It contains the Mukhtyarkar's Office, a

Police Station, Post Office and *masafirkhana*. The nearest railway station is Jungshahi on the North-Western Railway, 37 miles distant. At a distance of about four miles is situated the village of Uderolal, which contains a shrine built by one Seth Manghamal in honour of Uderolal's passing some time there while achieving a victory over an oppressive ruler of Tatta. An annual fair takes place on the Chetichand and is attended by about 400 persons.

Ladiun ($24^{\circ} 19'$ north latitude, $68^{\circ} 7'$ east longitude)

Ladiun. has been the headquarter station of Shahbandar Taluka since December

1892 and has a population of 616. It contains a Mukhtyarkar's Office, District Bungalow, Police Station, Dispensary, *masafirkhana*, Vernacular School and Post Office. The nearest railway station is Jungshahi on the North-Western Railway, 42 miles distant. A fair is held at the tomb of a saint at Shah Yakik, two miles distant from Ladiun. It begins on the first Sunday in the month of Chet, which corresponds to March and April, and lasts for 3 or 4 days. The total attendance is about fifteen thousand persons. Gold and silver articles, wearing apparel, silk, ivory, metal vessels, fancy articles, sweetmeats and fruits are sold there and the sales amount to about 20,000 rupees. The mausoleum at Shah Yakik contains two tombs plastered with lime without inscriptions. On the road leading from Ladiun to Ghungani, 5 miles south-east of the mouth of the Sattah Wah, is a conical hill crowned by the shrine of Aban Shah, of whom little or nothing is known. This hill and a few smaller adjacent elevations constitute the only pieces of rising ground in the Shahbandar Division. They are evidently an outcrop of the hills on the Tatta side of the river. They are composed of a rather soft yellow stone. *

Laheribandar or Larrybandar,* as it is always called

Laheribandar. by old writers, was one of the principal ports on the Indus as long as

the Baghar was an efficient branch of that river, discharging into the sea by the Pitti (Rahu) and Kudi mouths. Captain Hamilton says (1699): "Sindy is the westernmost Province of the Mogul's dominions on the sea coast, and has Larribunder to its Sea Mart, which stands about 5 or

* La i Bandar (the Port of the Lac) was very probably the original pronunciation.

6 leagues from the sea, on a branch of the river Indus, capable to receive ships of 200 tons. It is but a village of about 100 houses, built of crooked sticks and mud; but it has a large stone fort with four or five great guns mounted on it to protect the merchandise brought thither from the robberies of the Ballowchies and Mackrans that lie near them to the westward and the Jams to the eastward, who, being borderers, are much given to thieving and they rob all whom they are able to master." Merchandise was sent from Larribandar to Tatta, which, according to Captain Hamilton, was about 40 miles distant, on camels, oxen and horses. When Mr. Crowe represented the East India Company in Sind, at the end of the 18th century, one of his factories was at Lahoribandar. In 1831, when Alexander Burnes passed up the Indus, the Baghar channel had been deserted for three years and the trade had gone to Shahlendar and Vikar (Ghorabari). A little further up the river (Thornton says 2 miles) was the town of Dharaja or Dharaji, a much more important place than Lahoribandar, which was, in all probability, merely a landing place for Dharaja at certain times. The Raja of Dharaja was assassinated at the instigation of Ghulam Shah Kalhora who then seized his dominions (see "A" Volume, page 111). The ruins now pointed out as those of Lahoribandar are situated in level country, on a small creek which joins the Wango and the Rahu, and appears to be regularly submerged at spring tides. Little is left now, but mounds of bricks, with traces of stone buildings here and there and the ruins of a brick mosque.

On the west, about a quarter of a mile distant, is a fort built entirely of red bricks, which is no doubt the very one seen by Captain Hamilton. The walls, five feet thick, still stand in some parts to a height of 14 feet. The fort is 350 feet square and appears to have had 14 bastions. A mile west of it is a shrine of one Balushah, much visited by Jats and Muhanas.

Laki, a village of the Manjhand Mahal of the Kotri Taluka and at the extreme north point of the district, is seated close to the west bank of the Indus and immediately below the Laki hills, which here rise to a considerable elevation.

It has a railway station of its own name and contains a *musafirkhana*, Vernacular School and Post Office. The town is situated on the main road leading from Kotri to Sehwan. A branch road leads to the hot springs of Dhara Tirth, distant about 2 miles, the water of which, like that of Mangho Pir, is considered highly efficacious for the cure of cutaneous and other diseases. Unlike that of Mangho Pir, it has a strong smell of sulphuretted hydrogen, a saline and bitter taste and alkaline reaction. On analysis it has been found to contain about 7,050 parts of solid matter (dried at 100° c.) per million, the bases present being chiefly magnesium and sodium, as sulphides, chlorides, sulphates and carbonates. As a mineral water its most characteristic properties may be considered to be due to the presence of sulphides of magnesium and sodium. The surroundings of the springs have in the last few years been much improved for the convenience of those using them.

Manjhand (25° 55' north latitude, 68° 17' east longitude) is the headquarter station of the mahal. It is a municipal town

having a population of 2,838 and contains a Deputy Collector's Bungalow, Mahalkari's Office, Police Station, Post Office, Vernacular School and *musafirkhana*. It stands on the high road from Kotri to Sehwan and has a station on the North-Western Railway a mile distant. There is a tomb of Shah Awes near Manjhand which is visited by a considerable number of people.

Allusion to the Maurypur Salt Works has already been made in Chapter 9 of the "A" Volume.

Maurypur Salt Works.

They are situated in the Moach plain, about seven miles west of Karachi, where strong brine, amounting almost to a saturated solution of nearly pure chloride of sodium, may be found in many places, about 12 feet below the surface. Mr. Maury, the officer of the Bombay Salt Department, who was deputed to Sind in 1879 to organize the works, and after whom they are named, closed the scattered pans, which he found on the plain, and laid them out on a compact, symmetrical and admirably designed plan, with a high surrounding embankment as a protection from floods. The original works were completely washed away in the cyclone of 1907. Other works above

tide level were constructed in the same year, enclosing a larger area of land than before.

The works were started with 39 pans. This number has been increased from time to time and there are now 140 pans within the permanent embankment, but about 100 temporary pans have recently been opened outside the embankment, with a view to increase the output, which amounted in the calendar year 1917 to five and a half lakhs of maunds compared with one lakh of maunds in 1879. It is intended to include the temporary pans in the permanent works and to extend the embankment for the purpose. Brine is lifted from shallow wells in buckets suspended from the longer end of a lever of bamboo construction, the shorter end of which is weighted with a basket of stones. The brine is run into shallow beds, 25 feet square and 6 inches deep. The surface of the beds is plastered with a peculiar kind of clay found in the neighbourhood, which is beaten down and allowed to harden, forming an impervious medium through which water cannot percolate. The heat of the sun evaporates the brine in the pans, and causes the salt in the water first to form on the surface and then as the residue increases in gravity to sink to the bottom of the pan in fine crystals. The salt is scraped together with toothless rakes and then washed by the basketful in brine, the amount of washing depending on the degree of whiteness required. The finished product is heaped by the manufacturers on drying platforms alongside the pan where it is allowed to dry for a week.

Inside the embankment, running right round and through the centre of the works is a wide trench which serves two purposes. It prevents the surreptitious removal of salt, and it assists in feeding the brine wells, into which the water from the trench percolates. The saline strength of the water in the wells varies considerably and some of the pans consequently turn out far larger quantities of salt than others. Another cause of variations in production is the cold winds in winter which reduce the outturn and cause the crystals sometimes to assume a peculiar needle-like formation with a considerable impregnation of magnesia.

It is popularly asserted that the wind causes the formations. To a certain extent it may be so, as the magnesia "*suis*," or needles as they are called, generally occur in the cold weather. But their formation can be practically stopped by a careful manufacturer.

A series of 20 or 24 of the "beds" referred to above constitute a "pan" which is the unit of the subdivision for administrative purposes. Each pan has its own wells and dryage platform and is held by a manufacturer (or Lunari) on a yearly license subject to good behaviour and satisfactory work.

Pans are allotted by the Superintendent free of charge, and when the holder dies, his holding usually is continued to his family; but bad conduct may entail expulsion.

One Lunari may hold several pans, working them with the help of his family or servants. Pans are held principally by Makranis, Baluchis, Parities, Vanis and Zikris, the last predominating. The Lunarais with their families are accommodated in a village not far from the works. The population of the village is estimated at about 1,200.

Upto the time of the crop of each bed being taken in by the Superintendent of the works on behalf of Government the salt is the property of the "Lunarais." On the Superintendent passing it, as clean, dry, and suitable for human consumption it is carried and stored after weighment on platforms, in conical heaps (thatched with mats to preserve the commodity from climatic deterioration) of 25 to 50 thousand maunds. The platforms are so located as to be generally convenient for storage to the contractors, who are paid at the rate of Rs. 2-1-4 per 100 maunds for the work of storage. The Lunarais are paid from one anna and six pies to one anna and nine pies per maund. A special rate of two annas per maund is paid for salt of superior whiteness.

The business of removing salt from Maurypur to the central market at Karachi had gradually fallen into the hands of a ring of merchants who divided amongst themselves the work of transport and were able to keep the cost of camel and boat transport down to a low figure. So long as the public secured the advantage of low rates the arrangement was unobjectionable. But in recent years the merchants

monopolized the means of transport and a ring forced up prices. In order to break down the operations of the ring, and to make salt readily available to the public at a low cost, a Government Depot was established in Karachi in 1910 for the sale of salt, and this depot has served its purpose.

The Maurypur Salt Works supply the greater part of Sind, part of the supply being issued from a depot at Sukkur, and part from the new Karachi Depot. The territory of His Highness the Mir of Khairpur also draws its supply from these works. Salt of the Karachi and Sukkur Depots is transported in bond through the medium of a contractor whose services are also utilized for the carriage of salt to Khairpur. The transport contractor is free to remove salt to Karachi by the land route or by sea. He is paid 20 pies per maund for transport of salt to the Karachi Depot and 18 pies per maund for transport to the Karachi Bandar Station for despatch to the other two destinations. In special cases salt is also issued direct from the work. The charges amount to Re. 1-8-1 per maund, and include cost price, duty, storage and establishment charges.

One of the chief problems confronting the Salt Department in Sind is to increase the outturn of salt at Maurypur to the largest possible extent. It is proposed to extend the works, and at the same time to improve the conditions under which the Lunaris work and provide an adequate supply of fresh water for the village.

The Superintendent, Inspector, clerical staff and guard peons all live at the works in buildings provided for them by Government.

Mirpur Bathoro (24° 44' north latitude, 68° 18' east longitude) is the headquarter station of the taluka of that name and has a population of 2,497. It possesses a Mukhtiyarkar's Office, Public Works Department Inspection Bungalow, Dispensary, Post Office, Vernacular School, Police Station and *musafirkhana*. It had a Municipality but that was abolished in 1895. The nearest railway station is Jungshahi, 47 miles distant. It had a name for the printing of cotton cloth, but the industry is dying out. Lacquer work is also done in the town. There is a large tank in the centre of the town, the water of which is used for drinking

purposes. This town with the surrounding country belonged before the British conquest to Mir Sher Muhammad of Mirpur, and Burnes states that it yielded a revenue of 5 lakhs of rupees.

Mirpur Sakro (24° 33' north latitude, 67° 40' east longitude) is the headquarter station of the taluka and has a population of 1,720.

Mirpur Sakro.

The nearest railway station is Dabheji, at a distance of 22 miles. It contains a Mukhtyarkar's Office, Public Works Department Bungalow, Police Station, Vernacular School, Dispensary, Post Office and *musafir-khana*. At a distance of 10 miles to the north-east of Mirpur Sakro, and about 2 miles from Gujo, is situated the tomb of Sheikh Haji Turabi. It is plainly visible from Gujo, which is only 8 miles from Jungshahi. It is a humble old building, measuring 13 feet each way and undecorated, but derives interest from the confident statement of the author of the "Tufat-ul-kiram" that it is the resting place of a famous Arab general by name Sheikh Abu Turab, who captured the fort of Bukkur and other places in western Sind during the reign of the Abbasside Khalifa Mansur, for confirmation of which he appeals to the date 171 on the dome. If there is no fraud here and 171 is not a mistake for 771, this must be the oldest historical record of any kind in Sind. According to the local tradition the Sheikh was a saint who lived in the day of an oppressive Hindu Raja by name Tharna, whom he transmuted with his army into a hill. The hill remains to this day. The tomb has been repaired occasionally by devotees of the saint, who are said almost to have obliterated the old Arabic inscription. A small monthly fair is held at the shrine.

Pir Mangho, or as it is vulgarly called Mugger Peer, 10 miles north of Karachi with which it is now connected with a metalled road,

Mugger Peer.

is the tomb of Haji Mangho (the Arabic form of the name), a holy hermit, who is said to have been settled there about the middle of the thirteenth century. He was visited by a quaternion of saints known as the four friends, of whom Lal Shahbaz Kalandar of Sehwan was the most famous, and they made the barren valley a more eligible residence

for him by causing a hot spring to issue from the rock and a grove of date palms to spring up from the ground. When the Pir died and was buried, his grave became a place of pilgrimage for pious Muslims from all parts of the country. But it is also a resort of Hindu devotees, who call it Lala Jastraj. This double character is common among the shrines of Sini: the Mussalman Lal Shahbaz is the Hindu Raja Bhartari and the Mussalman Khwaja Khizr is the Hindu Jinda Pir.

Mugger Peer is traditionally "a place to see," the only one in the neighbourhood of Karachi. Lieutenant Curless of the Indian Navy, who was surveying the Sind coast in 1838, heard of it and made an enterprising excursion to it. A few extracts from his account will give a fair idea of the place as it was:—

"An hour's ride brought us to the foot of the hills, which are about 800 feet high and of coarse sandstone formation: we crossed them through an irregular rocky ravine, having every appearance of being the bed of a large torrent during the rains, and then pursued our way along several small valleys bounded by long narrow ridges or detached hills. The valley of Pir Mangho is surrounded by hills 700 or 800 feet high, between which glimpses are occasionally obtained of the level plains beyond. An extensive grove of dates and other trees occupies the centre of the plain and on the western side there is another." "The spring gushes out in a small stream from among the roots of a picturesque clump of date trees covering the extremity of a rocky knoll of limestone about 30 feet high and falls into a small natural basin, from whence it escapes in numerous rills to the adjacent gardens." "It is colourless and perfectly pure to the taste, having no perceptible flavour of any kind, but, from the stones in some of the rivalets being encrusted with a soft substance of a dark, reddish brown colour, probably contains a small portion of iron. The water is so warm that at first you can scarcely bear your hand in it, and its temperature was afterwards found to be 133°.* The natives say it cures every disease, and they not only bathe in it whenever

* This temperature is nearly right: that of the water at the shrine is about blood heat. There is no trace of sulphur in this water, nor of iron. Like most Sind water it contains salts (of sodium, magnesium and calcium) which were found to amount to 1·4 parts in 1,000.

they have an opportunity, but drink it in large quantities." "After everything worthy of notice about the Kisti spring had been examined, we mounted our horses and proceeded to the temple on the western side of the valley. It is surrounded by a thick grove, and after emerging from the narrow path that leads to it we came suddenly upon one of the most singular scenes I ever witnessed. Before us lay a small swamp enclosed in a belt of lofty trees, which had evidently been formed by the superfluous waters of a spring close by flowing into a low hollow in the ground. It was not a single sheet of water, but was full of small islets, so much so that it appeared as if an immense number of narrow channels had been cut so as to cross each other in every direction. These channels were literally swarming with large alligators, and the islets and banks were thickly covered with them also. The swamp is not more than 150 yards long by about 80 yards broad, and in this confined space I counted above 200 large ones, from 8 to 16 feet long, while those of a smaller size were innumerable. The appearance of the place altogether, with its green, slimy, stagnant waters, and so many of these huge, uncouth monsters moving sluggishly about, is disgusting in the extreme and will long be remembered by me as the most loathesome spot I ever beheld. After gazing upon the scene some time we proceeded round the swamp to the temple, where the priests had spread carpets for the party under the shade of some trees. They told me it was a curious sight to see the alligators fed and that people of rank always gave them a goat for that purpose. Taking the hint I immediately ordered one to be killed for their entertainment. The animal was slaughtered on the edge of the swamp, and immediately the blood began to flow, the water became perfectly alive with the brutes, all hastening from different parts towards the spot. When the meat was thrown among them it proved the signal for a general battle: several seized hold of a piece at the same time and bit and struggled and rolled over each other until almost exhausted with the desperate efforts they made to carry it off."

"The mosque is a neat, white building of a square form, surrounded by a small terrace, with a cupola and slender minarets at the corners, erected on the summit of a rocky

crag of limestone and said to be 2,000 years old. The interior of the mosque contains a tomb surmounted by a canopy of carved woodwork supported on slender pillars, the whole prettily and neatly ornamented and kept in excellent order as are the building and terrace, which are built of stone. On the site of the rock looking towards the alligators pool the perpendicular face of the cliff is covered with a coating of smooth chunam, and from the lower part the principal spring gushes forth through a small fissure. The water is received into two small reservoirs and then escapes through several outlets to the swamp below. In one of them was a large alligator, with about a dozen young ones, which the inhabitants have named the Peacock (or Mor) and they consider him to be the progenitor of the whole race. The water of this spring is perfectly fresh and slightly warm, but at another, a few yards from it, it is quite cold."

Since that time the place has been, as Sir R. Burton complained in 1876, "sadly civilized and vulgarized by Cockney modern improvements." The number of crocodiles is greatly reduced and the size too, if old reports are true. They have been confined, moreover, by a wall in a small and dirty tank, where they present a squalid and uninteresting spectacle. Tombs, adorned with the poorest description of glazed tiles and not kept in repair, give a shabby look to the environment of the shrine. The most interesting object is a *kandi* tree, hung with small calico bags containing the hair of infants.

One object of peculiar interest at this place has not received much attention and none at all from Sir R. Burton. Looking front

Buffal Tombs.

from the verandah of the bungalow two tombs are seen by themselves on a low eminence at a distance of less than half a mile, which are altogether different from those in other parts of the valley. They are constructed of slabs of very hard limestone, delicately and beautifully sculptured in a great variety of designs, and then put together over the grave without cement. The larger of the two has a domed roof, on stone pillars, and appears to have contained four graves; but the dome is in a ruinous condition and the graves have fallen in. The other is an open platform with two tombs on it, the figures carved on which seem to

indicate that they cover the remains of women. The local story is that the principal tomb contains the body of one Sardar Khan, chief of the Burfati tribe, who was killed in a battle against the Jokhias at Allah Buna, about 10 miles from Pir Mangho. There is an inscription on this tomb, containing passages from the "Koran," but no information except the plain date 913. This gives the year A. D. 1506, at which period the Samas were ruling in Sind. Similar tombs are said to be found further on among the hills and there is a low ridge visible from the municipal water-works bungalow at Malir, covered with them. Some are ruinous, some in good condition, with the delicate carving sharp and clear, showing the hardness of the stone of which they were made. They have all the same character as those at Pir Mangho, but bear no inscription except, in some cases, a single name, often that of a woman. The Jani of the Jokhias lives in the neighbourhood, and his people seem to have preserved the same tradition as to their origin. The Burfatis, or Bullatis, are a sub-tribe of the Numrias, the most powerful tribe in Las Bela and the Kohistan, and it is more than likely that they had many struggles with the Jokhias before the latter established themselves in Malir and the Delta; but unless their women were Amazons, the popular story does not account for the female graves.

A charitable refuge for lepers, known as the Hiranand Leper Asylum is maintained by private benevolence on the outskirts of the village at Pir Mangho.

Mughulbhim* (24° 21' north latitude, 68° 19' east longitude), a small town on the bank

Mughulbhim. of the Gungro, with a population of 1,720, is the headquarter station of the Jati Taluka. It contains a Public Works Department Inspection Bungalow, Police Station, *musafirkhana*, Post Office, Vernacular School and Dispensary. A road runs from Mughulbhim to Lakhpat which is much frequented by Hindu pilgrims en route to Narainar and Dwarka. The nearest railway station is Jungshahi, 52 miles distant. Mughulbhim possessed a Municipality, which was abolished in 1878. This town is said

* This appears to have been quite recently corrupted from Mugharbhim or Mughribhim.

to owe its name to Bhin *alias* Shekh Salamat, a chief of the Kureshi tribe, and Mughal (or Mughar?) his son, who were killed resisting the Hindu king of Halar, who attacked them owing to their refusal to hand over to him a Saiyid charged with the murder of the king's son. Over their bodies tombs were erected by an unknown disciple and adjoining these there is a beautiful and well painted mosque. There are besides two other tombs, which contain the bodies of a grandson of Bhin and his grandfather Nibho. The buildings are of the conventional type, made of common brick and plaster, with no features of architectural distinction. Both the saints Mughar and Bhin are credited with having performed many miracles. A large black stone weighing 120 lbs. lies before the chief tomb, with a groove made on it by the thumb of the saint's brother Umar. The story is that, at the sight of this stone in the hands of Umar, a thief restored stolen property. The stone is revered greatly. Women go and sing beside it almost every night and sick men touch it in the hope of being cured. The followers of these saints are mostly Jats. An annual fair is held on the 23rd of the Hindu month *Phagun* and lasts for about 6 days. On the first day takes place the *ashh* ceremony, which consists of white-washing the tombs: the people of the neighbourhood bring all the milk in their homes and mix it with the lime for white-washing. On the fifth day from the commencement comes the *par* ceremony which consists of removing all the *pars* (the coverings of the tombs), washing them in the Gungro, drying them and putting them on again. The average number of persons attending the fair is about 10,000 and goods of all sorts are sold to the estimated value of Rs. 20,000. No sale of animals takes place, as is customary at other large fairs.

At a distance of 5 miles north-east from Mughulbhin are the remains of what is supposed to have been a fort, called Nandkut, "the fort of Nand." Nand Raja is believed to have flourished before the Kalhoras and to have been very rich. Buried treasure is supposed by the inhabitants to exist here.

Pir Patho is a *Ziarat-gah* which, according to Captain Wood (1841), was second only in sanctity to the shrine of Lal Shahbaz

Pir Patho.

in Selwan. The situation is a cliff separated from the southern extremity of the Makli hills by the channel of the Baghar and lying about $12\frac{1}{2}$ miles south of Tatta. The ruins of a great mosque *idgah* and *minar* afford evidence of the former existence of a large town at the base of the hill; but the object of veneration is the conspicuous white tomb, crowning a height and visible from afar, of a holy man whom Mussalmans call Pir Patho and Hindus call Raja Gopichand. He is said to have been born in A. H. 560 and to have been a contemporary of the Persian poet Saadi, which may be true of the Pir. The Hindu, whose shrine he usurped, probably lived many centuries before. In the time of the Talpurs stores of grain and *ghi* were kept at the shrine and pilgrims were fed at the expense of the local governor. Since those days the celebrity of the place has much declined, but hundreds of Kachhis still flock to the annual fair held there from the 11th to the 14th of the Mahomedan month *Rabi-ul-wat*. There is a Public Works Inspection Bungalow and also a *musafirkhana*.

Rani-ka-kot is the name of the fort about 7 or 8 miles from the town of Samn. It is thus described by Captain Del-Hoste, of the

Rani-ka-kot.

Bombay Army, who in 1839 was Assistant Quarter-Master General of the northern division of the army: "Rani-ka-kot was built by Mir Karam Ali Talpur and his brother Mir Murad Ali, about A. D. 1812, cost 12,00,000 rupees and has never been inhabited, in consequence of there being a scarcity of water in and near it. That so large a fort should have been constructed without its having been ascertained beforehand that an article so indispensably requisite, not only for the use of man, but even for the construction of the walls, was wanting, seems most extraordinary, but I am told that this was the reason for its having been abandoned. A rapid stream in the rains runs past it and joins the Indus, and, by a deviation from its course, parts of the walls of this fort have been destroyed. The object of its construction seems to have been to afford a place of refuge to the Mirs in case of their country being invaded." At present the Samn river, or as it is there called the Rani Nai, runs through the fort, and it is stated that there is now no scarcity of water whatever.

Rarhi (Reri), an ancient town in the Jati Taluka, some 16 miles north-east of Mughulbhin, was a flourishing centre of trade 100 years ago. The tradition of this fact is kept up in a phrase still current. "Are you a Shahukar of Rarhi?" is a question asked ironically of a man who is throwing his money about. All that is left of Rarhi is a few domed tombs (the largest being that of a Khoja saint, Nur Shah) and the marks of the foundations of a considerable village in the midst of a bare desert. Dr. Burnes, in his "Visit to the Court of Scinde," about 1828, mentions the population of the village as having declined to 500 or less. The decline was evidently due to the main channels of irrigation in that direction having dried up.

Shahbandar is a village in the Shahbandar Taluka. It is in the Indus Delta and was formerly on the east bank of the channel, which discharged its waters into the sea by the Mal mouth. At present it is 10 miles distant from the nearest point of the Indus. It is said to have been founded in 1759 A. D. by Ghulam Shah Kalhora, who ordered all the residents of Auranga to move to it. The English factory at Auranga Bandar was included in this transfer, and it is recorded that, previous to the dissolution of the factory in 1775, it supplied a considerable establishment for the navigation of the river, consisting of 14 small vessels, each of about 40 tons burthen. The rulers of Sind had a fleet of 15 ships stationed at Shahbandar. It would seem that the earthquake of 1819 caused great alterations in the lower part of the Indus and brought about the decay of the town by withdrawing the current from the branch on which it stood. So it dwindled away into obscurity and has no trade nor manufacture of any kind whatever. It is a colony of Cutchi Bhatias, a few of whom still trade with Muscat and other parts, doing their business at Karachi or Keti Bandar, but keeping their homes and families at Shahbandar. It was formerly the headquarter town of the taluka, but these were removed to Ladiun in 1892.

Sirganda, or Sundo Bandar, so called from the petty village of Sundo, four miles from Mughulbhin, gets any importance it

has from being the furthest point to which boats have been able to ascend the Sir creek since the Pinyari river silted up or the Mirs dammed it, if that account of the matter be true. It is in fact the grain port of Mughulbhin and the Jati Taluka. It is not mentioned by any of the officers who surveyed the Delta before the British occupation of Sind, but its trade is included in the earliest extant reports of the Collector of Customs at Karachi, and it continues to the present day to carry on a considerable traffic with Karachi and the coast ports. The value of the imports and exports during the last five years is shown below :—

Imports.

	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.
	Rs.	Rs.	Rs.	Rs.	Rs.
Merchandise ..	1,78,721	1,80,742	1,32,924	1,38,576	1,55,258
Treasure ..	190,501	2,43,393	1,92,464	1,37,420	1,70,763
Total ..	3,70,225	4,24,135	3,25,388	2,76,296	3,25,171

Exports.

	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.
	Rs.	Rs.	Rs.	Rs.	Rs.
Merchandise ..	6,70,688	6,90,121	5,12,420	4,98,657	8,40,440
Treasure ..	..	..	..	..	..
Total ..	6,70,688	6,90,121	5,12,420	4,98,657	8,40,440

The imports consist of manufactured and miscellaneous commodities, the exports mainly of rice, much of which goes to Cutch.

The duty collected on this during the last five years is shown below :—

1911-12.	1912-13.	1913-14.	1914-15.	1915-16.
Rs.	Rs.	Rs.	Rs.	Rs.
22,719	50,462	22,994	24,302	40,451

There is considerable passenger traffic also when labourers from Cutch come in to reap the rice harvest and return to their home after it. There is a substantial Custom House, surrounded by the warehouses of the merchants. There have been many complaints lately about the creek having

silted up to such an extent that only the smallest craft could go up to the Custom House. This was partly due to the indolence of the boatmen themselves, who preferred to heave sand ballast into the stream rather than take the trouble to put it ashore; but more perhaps to the cutting down of jungle which had acted as a screen against sand drifts. An attempt was made with some success some years ago to scour the channel by opening the sluices of the Gangro canal at the ebb of the tide.

Sujawal ($24^{\circ} 36'$ north latitude, $68^{\circ} 7'$ east longitude)

Sujawal. is the headquarters of Sujawal Taluka.

It contains a population of 1,553.

Here the Assistant Collector has a residence, and here are situated a Mukhtyarkar's Office, Resident Magistrate's Court House, Veterinary Dispensary, Post Office and Vernacular School. It is 4 miles east of Saidpur steam ferry, which connects it with the other side of the river, and is 32 miles distant from the nearest railway station, Jungshahi.

Tatta, or Nangar Tatta ($24^{\circ} 45'$ north latitude,

Tatta. $67^{\circ} 59'$ east longitude), the head-

quarters of the Tatta Taluka, is 50 miles

east of Karachi and 13 miles distant from the Jungshahi Station of the North-Western Railway with which it is connected by a metalled road. Two miles from Tatta, where the road crosses the Makli hills, there are a Travellers' Bungalow and a District Bungalow.

The date of the foundation of Tatta is unknown, but it is certain that a town has existed on the site for many centuries. As long as the Makli hills stood at the apex of the Delta—and that condition only ceased 140 years ago by the silting up of the channel which is now the Kalri canal—the situation was so obviously suited to a commercial town that it never could have been long unoccupied; but both the site and the name of the town have probably changed many times, and such changes can seldom be traced with exactness because the new name does not at once replace the old. For instance, Goa is spoken of as the capital of Portuguese India, but the town which is referred to is some miles from the original Goa and its proper name is Panjim, or Nova

Goa. Early writers supposed Tatta to have been Alexander's Patala, but that seems to be out of the question. It has also been identified with Debal, the great Hindu town which was first attacked by the Arabs under Muhammad Kasam, a theory discredited by Major-General Haig, but supported in a measure by Mr. H. Cousens, on account of the evidence of the ancient existence of a great Hindu temple on the Makli hill, the materials of which have been employed in the older Mussalman tombs. The Sama kings, who came into power in the middle of the 14th century, called their capital Samui, but it was only three miles north of the present site of Tatta, to which the population may have transferred itself gradually until the Jam Nizam-ud-din, by some official recognition of the new settlement, gained the credit of having founded the city of Tatta about the end of the 15th century (see *History*, Volume A, page 100). The city has moved a good deal in much more recent times, creeping after the retreating river by a process of growth on the east and decay on the west. It has also been sacked or burned three times—first by Shah Beg Arghun in 1521, then by a Portuguese force in 1535, and lastly by its own ruler, Mirza Jani Beg, when he was resisting Akbar's forces in 1591. Nevertheless it continued to be the capital of south Sind until the building of Hyderabad in 1768 and rose to great splendour. Captain Alexander Hamilton, who saw it in 1699, thus writes of it: "Tatta is the emporium of the Province, a very large and rich city. It is three miles long and one and a half broad, and is about 40 miles from Larrybunder (Lahori) and has a large citadel at its west end capable to lodge 50,000 men and horse, and has barracks and stables convenient for them and with a palace built in it for the Nabob." "Tatta stands about two miles from the river Indus, in a spacious plain, and they have canals cut from the river to bring water to the city, and some for the use of their gardens. The King's gardens were in pretty condition in Anno Domini 1699 and were well stored with excellent fruits and flowers, particularly the most delicious pomegranates that ever I tasted." Again he says: "The city of Tatta is famous for learning in theology, philosophy and politics, and they have 400 colleges for training up youths in those parts of learning." Tatta had at one time a lucrative trade with the Portuguese, and

from the following passage it seems that their missionaries must have got a footing there and lost it:—"The Portuguese had formerly a Church at the east end of the city. The house is still entire and in the vestry are some old pictures of saints and some holy vestments, which they desired to sell; but I was no merchant for such bargains." There had been a drought for the previous three years, which "caused a severe plague to affect the town and circumjacent country to such a degree that, in the city only, 80,000 died of it, that manufactured cotton and silk, and above one-half of the city was deserted and left empty." This was the time when Surat and all Gujarat suffered so severely from the plague.

After the rise of the Kallhoras the decay of Tatta was very rapid. Henry Pottinger, who passed through it in 1809, writes: "We rode a long way after we got among ruins, before we came to the habitable part of the city." In 1831 Alexander Burnes described it thus: "It does not contain a population of 15,000 souls, and of the houses scattered about its ruins one-half are destitute of inhabitants. Of the weavers of 'loongies' for which this place was so famous, 125 families only remain. There are not forty merchants in the city." Even the heaps of ruins which these writers mention have largely disappeared since by the action of wind and water, or the overgrowth of vegetation. The Tatta of to-day is a town of 11,161 inhabitants, with narrow streets, but not very dirty as towns go in Sind. The houses are two and three storeys high, but all of wattle and mud plaster. Stone has never been used in domestic architecture in this town. The public buildings are the Steele Hall, Mukhtyarkar's Office, Police Station, Dispensary, Post and Telegraph Office, Reading Room and Library, Anglo-Vernacular School and *musafirkhana*. The factory of the East India Company, which had a trading station here from 1738 till 1775, was used at the time of the conquest and long after as a travellers' bungalow, or officers' quarters, but it fell into ruins and was overbuilt nearly forty years ago. A large yard on the opposite side of the street, which is said to have been part of the Company's premises, has an old and massive wooden gate and an entrance of rough stone pavement. A curious memorial of early English enterprise in this quarter

of the world is the grave of Edward Cooke, which lies 150 yards from the District Bungalow. It bears the following inscription in deep relief on a slab of yellow stone:—

Here lyes the manes of Edward Cooke,
who was taken out of the world in the Flower
of his Age, a person of great merit and much
lamented by his friends, learned in many
languages, of great humanity, a sound judgment
and generous disposition, who departed
this life on the 8th of May 1743. Aetatis
sue 21.

As blooming lillies grace the field,
So for a day they shine,
Like him to God, so they yield
Their selves, but not their name resign.
To whose memory his servants erected this
tomb.

Nothing is known of Edward Cooke, who preceded the East India Company by fifteen years. There are graves near his and also some in the town, which are said to be those of Europeans, but they mostly bear no inscription and nothing is known about them. Tatta is distinguished among the towns of Sind for its unhealthiness. The lowlands all round are submerged during the inundation, after which malaria rages in the town. Early travellers were struck with the sickly appearance of the inhabitants and the British troops encamped on the Makli hills in 1839 learned a lesson which was long remembered. The 22nd Regiment alone had 1,576 cases in hospital between August and January. There are still a good many Banias in Tatta, engaged in trade, and its ancient industry, the manufacture of silk *lungis*, is carried on still upon a small scale. The most influential section of the community by far is the Saiyids, who have settled here for centuries. The historian of Sind, Ali Sher Kani, the author of the "Tuhfat-ul-kiram," was a citizen of Tatta and lived in the middle of the 18th century. The only monuments which survive of the former glory of Tatta are the tombs on the Makli hills and the Jama Masjid and Dabgar Masjid in the town. The latter will be conveniently described with the former, as they belong to the same time and style.

The Makli hills are geologically a very interesting outcrop, in a flat, alluvial plain, of the great bed of tertiary rocks which have been distinguished as the Ranikot Group (see Geology, Volume A, Chapter I), consisting of nummulitic limestone. The range, which starts from Pir Patho, runs north for about 11 miles, ending due west of Tatta and scarcely a mile distant from it. Seen from the west it scarcely seems to deserve the name of a hill, but from Tatta its aspect is more abrupt. The actual height is from 80 to 150 feet above sea level. The top is a plateau studded with the formal and forbidding "cactus" so-called (*Euphorbia nereifolia*) and strewn thick with pebbles and nodular lumps of hard, yellow limestone, which are sometimes quite speckled with little nummulites. These get detached and lie on the ground in such quantities that it has become a trade to collect, drill and string them for sale to pilgrims on the way to Hingla; in Baluchistan. They are called *thumra*. But more interesting far than its geological features is the great necropolis which occupies the northern half of the Makli hill. The population of this city of the dead has been estimated at one million. It is impossible to say when the Makli hill first began to be a cemetery. It was evidently invested from a very early time with a vague sacredness, which accumulated as one Saiyad after another found a resting place in it. The Sama Jams had their capital, Samui, just below the north end of the hill and, according to one popular tradition, Jam Tamachi and the fisherman's daughter whom he made his queen are laid in two old tombs at that end of it. With Jam Nindo, or Nizam-ad-din, we come to history. There is no doubt about the identity of this tomb, built in 1508 A. D. It is entirely of sculptured stone and the designs are distinctly Hindu in their character. The Superintendent of the Archaeological Survey is of opinion that a large part of the material of this tomb has been taken from some old and magnificent Hindu temple, and there is a tradition that such a temple existed. The Arghuns, who expelled Jam Nindo's son, lived at Sukkur and were interred at Mecca, but under the Tarkhans, who followed them, Tatta again became the capital of lower Sind, and then an era of architectural magnificence set in. The mausoleum of Mirza Isa, the first Tarkhan ruler, is built entirely of stone, but in that of his son, Muhammad

Baki, and all the subsequent tombs of any distinction, the principal materials are glazed bricks or encaustic tiles. Of this work Mr. H. Cousens, Superintendent, Archaeological Survey, Bombay, says: "The buildings of the latter class are almost entirely built of brick masonry, the brick-work being very superior, being made of the best pottery earth, perfectly formed, dense and having clean, sharp-cut edges. Some are unglazed, a plain dark red, while others have their outer surfaces enamelled in dark and light blue and white. The joints between them are exceedingly fine, but an imitation joint is formed on one side of each brick by a $\frac{1}{8}$ inch strip along its edge being sunk and enamelled white. Most of the brick buildings have been built of these bricks with the various coloured faces so disposed as to form patterns, every brick being burnt for its own position. When used in the inner lining of domes they have been worked in zigzag patterns, in radiating divisions and flutings from apex to springing line, and look remarkably well though quaint. But the finest features in these buildings is the beautiful glazed tile-work in the shape of panels and dados. The lovely soft blending of the colours has run slightly in the firing, thus blurring the edges of the pattern, and the result of this accident is to give the work a softness and waxy, translucent look which is its chief charm. To my thinking the effect is superior to that of European tiles with their harder and sharper outlines. A single pattern will often run over several square yards of surface, each tile consequently being different from its neighbour, instead of a single small pattern from tile to tile. The pigments chiefly used are three, viz., a rich dark blue, a turquoise or light greenish blue, and white. The first two are very transparent colours and thus acquire great depth and richness. Now and again at Tatta is found a yellow, but very rarely in the old work. Its place is taken by a buff, unglazed tile or stone, being the same colour right through, and which, being a softer and subdued tint, harmonizes better with its surroundings."

In recent years steps have been taken to keep the tombs in repair, and all those detailed below, and also the Jama Masjid, Dabgar Masjid and Kalan Kot have been declared protected monuments under the Ancient Monuments Act. The principal tombs are:—

1. *Tomb of Mirza Jani Beg and Mirza Ghazi Beg.*—Jani Beg was the last independent Tarkhan ruler of Tatta. He resisted manfully, but unsuccessfully, the general whom the Emperor Akbar sent to take possession of Sind. Making his submission afterwards, he was reinstated as governor of Tatta. He died in 1599. His son Ghazi Beg succeeded him in his office and was also appointed governor of the province of Kandahar. He was murdered in 1611-12 A. D. and the remains of both father and son were interred in this tomb in 1613. It stands in a courtyard, on a high plinth, and is itself octagonal, with a domed roof. The plinth is of stone, but the superstructure is of glazed blue bricks in lines alternating with unglazed brown ones. This striped pattern is quaint and occurs nowhere else. The stone-work exhibits some beautiful carving and inscriptions. There are three tombs inside—two of marble and one of stone. This is the first of the imposing edifices which crown the slope near to the district bungalow.

2. *Tomb of Nawab Mirza Isa Tarkhan.*—This nobleman, who must not be confounded with his namesake the first Tarkhan ruler of Tatta, was appointed governor of south Sind by the Emperor Jehangir in 1627 A. D. and began to build his tomb, it is said, in the same year. It was finished in 1644. He had been deputed in the meantime on military service to Karnal, whence he is said to have sent the stone for the tomb; but according to another account it came from Junagad. The mausoleum as a whole is the most imposing one on the hill. It stands in the middle of an ample courtyard and is itself 70 feet square. In the centre is the great apartment, containing eleven graves, which rises through the full height of the building to the dome. This is surrounded on all four sides by pillared verandahs in two storeys. The whole is built of buff-coloured stone elaborately and exquisitely carved. The tombs within are literally covered with carving, which consists largely of texts from the Kuran in Arabic or Persian characters. Their ends are plain save for the names and dates inscribed on them. Outside, with an enclosure of their own, are the graves of the ladies of the family, distinguishable, as usual, by their flat tops, but as elaborately sculptured as those of the men. The dome is quite plain

on the outside and white. This tomb stands north of the one last described.

To the east of this tomb and in front of it is an enclosure in the same style, with a magnificently carved *mihrab*, which is said to contain the remains of the *zenana* of Nawab Isa Khan; but one of the graves in it bears the date 964 (i. e., 1557 A. D.), which would be about 90 years before the death of the Nawab. The history of this enclosure is uncertain.

3. *Tomb of Mirza Tughrul Beg.*—This is between the last two. Not much is known of Tughrul Beg, except that Kalan Kot at one time had the name of Tughrulabad, from which we may conjecture that he was a commander of some reputation. His tomb is in rather a ruined condition, but is now preserved from further damage. It is almost entirely of stone. The dome, or canopy, is supported by twelve sculptured stone pillars.

4. *Tomb of Diwan Shams Khan.*—This offers a contrast to the last two white-domed tombs, for its dome is faced on the outside with the finest red bricks, varied with lines of blue-green enamel. Probably the whole was originally enamelled. The whole of the structure is of the same work, except the foundation and plinth. It stands on a platform in a large courtyard. The Diwan, who was an Arghun, held the post of minister to one of the governors of Tatta appointed from Delhi. His tomb is said to have been built in 1638 A. D., during his lifetime.

5. *Tomb of Nawab Amir Khalid Khan.*—This is said to have been built at some time between 1572 and 1585 A. D. The Amir, of whom little else is known, had such a tender conscience that he left directions that his body should not be buried inside the mausoleum, which was reserved for seven holy men. Their sanctity has unfortunately not preserved it from utter ruin, for it bears a striking and unique inscription in white Arabic letters upon a broad band of large, deep blue tiles. Time has dealt more gently with the humble tomb of sculptured stone in the courtyard in which the body of the Amir is laid.

6. *Tomb of Mirza Isa Tarkhan.*—This Mirza was the first Tarkhan ruler of lower Sind and his tomb is said to have

been built in 1573 A. D. It stands, with several smaller tombs, in a large square courtyard, within which there are two minor courtyards. All are of stone, sculptured, inscribed and in some places perforated.

7. *Tomb of Jam Nizam-ud-din.*—This is the oldest of the tombs on the hill which have any clear historical interest, having been built in 1508 A. D. Jam Nizam-ud-din was the last but one of the Sama Jams and an autochthonous ruler, unlike the Mughals and Saiyids who afterwards covered the hill with their memorials. His tomb is a square building, without roof, built entirely of stone, the carving on which, as has already been said, affords strong grounds for inferring that the materials of some ruined Hindu temple have been freely used, omitting, or obliterating, idolatrous emblems. Two contiguous stones in the wall are sometimes of different breadths and contain dissimilar patterns. A staircase through the side wall leads to a narrow balcony and portico decidedly Hindu in their character. Numerous smaller buildings round about, in a more or less ruined condition, exhibit still more distinct traces of Hindu origin. An adjacent tomb, evidently of more recent date, is decorated internally with glazed tiles.

8. To the north of the last and on the other side of a valley is the large and conspicuous tomb of Saiyid Ali Shirazi, built of brick, with a large and two small fluted domes, all plastered and white-washed. There are inscriptions on some of the tombs within the enclosure, but none on the Saiyid's. This venerated man was chosen to carry the offerings of the people of Tatta to the Emperor Humayun at Umarkot (see page 104). He died in A. D. 1572 and his tomb is said to have been built by disciples of the Jokhia tribe.

Jama Masjid.—This truly magnificent mosque, which is still in use, is in the town of

Tatta. It was, according to the local histories, a gift from the Emperor Shah Jehan in recognition of the hospitality of the town, in which he sought refuge for some time when in rebellion against his father. It was begun in 1644 and finished in 1647, but the floor was not laid till eleven years after. It is said to have cost 9 lakhs of rupees. It is built in the form of a caravanserai, a great court enclosed by a corridor of ninety domed compartments,

exclusive of the *masjid* proper in the middle of one side and its counterpart opposite. It measures 315 by 190 feet and covers 6,316 square yards of ground. The exterior is quite plain and white-washed, but the whole interior, from the ground level to the centre of the highest dome, is covered with the most amazing variety of beautiful patterns worked out in coloured tiles. Many of the small domes along the sides are not so covered now, but probably were originally; for the whole edifice was in terrible disrepair when, under Sir Bartle Frere in 1855, it was saved by subscription, Government contributing Rs. 5,000. In 1894 again a sum of Rs. 20,500 was raised by the same means and spent in repairing the denuded faces of the walls with tiles made in Hala and Multan. These do not harmonize well with the old, but happily it was the dado chiefly that needed repair, where the patterns are comparatively simple. Higher up the designs are not printed on square or hexagonal tiles, as they are in the tombs on the Makli hill, but worked out in mosaic with minute tiles of different colours and shapes.

Dabgir Masjid.—This was probably in the heart of the town once, but lies quite outside of it now. It is a hopeless ruin, the dome having fallen in and much of the facing of enamelled tiles wholly disappeared, but what remains is so beautiful that measures have been taken to preserve it as far as possible from further destruction. The *mihrab* is so exquisitely sculptured that it is difficult for the visitor to realize that he is not looking at carved sandalwood but at stone. Yet the building is more than 300 years old, having been built by Amir Khushro Khan, who got into trouble by his handling of public moneys when he was governor of Tatta under Mirza Isa Tarkhan. (See History, Volume A, page 106.)

Samui, the capital of the Sama Jams before they moved to Tatta, lies three miles north-west of the latter, on high ground. Of it the report of the Archaeological Survey says that "it is now represented by a small hamlet of a few houses clustered upon a mound, with the indispensable *Pir's* tomb. There is very little of antiquity to be seen above ground save the indications of the foundation of a

plain brick mosque upon a low knoll upon one side of the village."

Kalan Kot, which is undoubtedly a perversion of *Kalian*

Kot, i. e., the Fort of Welfare, lies

Kalan Kot. about three miles south of the Travellers' Bungalow on the Makli hills. It was used by the Mussalmans, for to it the last of the Tatta Jams retreated when pressed by Akbar's army, and no doubt it was repaired or renewed by them and they re-christened it Tughrabad; but its origin appears to go much further back. As Burton has pointed out, both the words *Kalian Kot* are Sanskrit and the towers are all within bow-shot of each other, indicating that it was planned before firearms were in use. The local tradition which associates it with Alexander suggests points of resemblance to Kafir Killa, or Alexander's Fort, near Schwan. The massive brick-work of both in a country where stone was so handy is curious, and in *Kalian Kot* large bricks of the kind which characterize Buddhist remains are reported to have been dug up. The ruins now indicate a large and very strong fortress on a rock, which is, or at least was, surrounded on three sides by water and cut through on the fourth side by a very deep moat with perpendicular sides. The whole was guarded by massive towers of great height, which are now only huge mounds, and a curtain connecting them. The ruins of a large building, apparently a mosque, are still standing and show, by some ornamentation of enamelled tiles, that it was comparatively recent. Near it is a great reservoir for water. In the building was found, seventy years ago, a quantity of charred grain, which seemed to indicate that the place had been destroyed by fire.

Thano Bula Khan (25° 22' north latitude, 67° 52' east longitude) is the headquarter station of Kohistan Mahal and has a population of 1,192. It contains a Mahalkari's Office, Dispensary, Police Station, Vernacular School, Post Office and *musafirkhana*. The nearest station is Meting, at a distance of 24 miles. Good embroidery work is done and fine woollen pads for camels are made. This place is said to have been a camp of Bula Khan Naumardi when he withstood an invading force of Jokhias in the days of Nur Muhammad Kalhora.



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TABLE I.
AREA AND POPULATION.

States and Provinces.	Area in square miles.			Population in 1901.			Population in 1911.			
	Sq. miles.	Total.	Males.	Females.	Urban.	Rural.	No. of persons per square mile.	Total.	Males.	Females.
Alabama	50,520	1,010,400	505,200	505,200	101,040	909,360	20.0	1,010,400	505,200	505,200
Arizona	23,766	475,320	237,660	237,660	47,532	427,788	20.0	475,320	237,660	237,660
Arkansas	53,172	1,063,440	531,720	531,720	106,344	957,096	20.0	1,063,440	531,720	531,720
California	77,309	1,546,180	773,090	773,090	154,618	1,391,562	20.0	1,546,180	773,090	773,090
Colorado	103,837	2,076,740	1,038,370	1,038,370	207,674	1,869,066	20.0	2,076,740	1,038,370	1,038,370
Connecticut	5,543	110,860	55,430	55,430	11,086	99,774	20.0	110,860	55,430	55,430
Delaware	2,448	48,960	24,480	24,480	4,896	44,064	20.0	48,960	24,480	24,480
District of Columbia	287	57,400	28,700	28,700	5,740	51,660	20.0	57,400	28,700	28,700
Florida	55,561	1,111,220	555,610	555,610	111,122	1,000,098	20.0	1,111,220	555,610	555,610
Georgia	59,723	1,194,460	597,230	597,230	119,446	1,075,014	20.0	1,194,460	597,230	597,230
Idaho	84,240	1,684,800	842,400	842,400	168,480	1,516,320	20.0	1,684,800	842,400	842,400
Illinois	143,973	2,879,460	1,439,730	1,439,730	287,946	2,591,514	20.0	2,879,460	1,439,730	1,439,730
Indiana	36,422	728,440	364,220	364,220	72,844	655,596	20.0	728,440	364,220	364,220
Iowa	72,570	1,451,400	725,700	725,700	145,140	1,306,260	20.0	1,451,400	725,700	725,700
Kansas	81,556	1,631,120	815,560	815,560	163,112	1,468,008	20.0	1,631,120	815,560	815,560
Kentucky	40,400	808,000	404,000	404,000	80,800	727,200	20.0	808,000	404,000	404,000
Louisiana	52,433	1,048,660	524,330	524,330	104,866	943,794	20.0	1,048,660	524,330	524,330
Maine	33,094	661,880	330,940	330,940	66,188	595,692	20.0	661,880	330,940	330,940
Maryland	10,439	208,780	104,390	104,390	20,878	187,902	20.0	208,780	104,390	104,390
Massachusetts	8,007	160,140	80,070	80,070	16,014	144,126	20.0	160,140	80,070	80,070
Michigan	96,714	1,934,280	967,140	967,140	193,428	1,740,852	20.0	1,934,280	967,140	967,140
Minnesota	225,180	4,503,600	2,251,800	2,251,800	450,360	4,053,240	20.0	4,503,600	2,251,800	2,251,800
Mississippi	47,817	956,340	478,170	478,170	95,634	860,706	20.0	956,340	478,170	478,170
Missouri	68,806	1,376,120	688,060	688,060	137,612	1,238,508	20.0	1,376,120	688,060	688,060
Montana	147,040	2,940,800	1,470,400	1,470,400	294,080	2,646,720	20.0	2,940,800	1,470,400	1,470,400
Nebraska	77,344	1,546,880	773,440	773,440	154,688	1,392,192	20.0	1,546,880	773,440	773,440
Nevada	110,631	2,212,620	1,106,310	1,106,310	221,262	1,991,358	20.0	2,212,620	1,106,310	1,106,310
New Hampshire	9,332	186,640	93,320	93,320	18,664	167,976	20.0	186,640	93,320	93,320
New Jersey	8,720	174,400	87,200	87,200	17,440	156,960	20.0	174,400	87,200	87,200
New Mexico	121,412	2,428,240	1,214,120	1,214,120	242,824	2,185,416	20.0	2,428,240	1,214,120	1,214,120
New York	47,155	943,100	471,550	471,550	94,310	848,790	20.0	943,100	471,550	471,550
North Carolina	50,814	1,016,280	508,140	508,140	101,628	914,652	20.0	1,016,280	508,140	508,140
North Dakota	130,723	2,614,460	1,307,230	1,307,230	261,446	2,353,014	20.0	2,614,460	1,307,230	1,307,230
Ohio	44,826	896,520	448,260	448,260	89,652	806,868	20.0	896,520	448,260	448,260
Oklahoma	69,561	1,391,220	695,610	695,610	139,122	1,252,098	20.0	1,391,220	695,610	695,610
Oregon	46,340	926,800	463,400	463,400	92,680	834,120	20.0	926,800	463,400	463,400
Pennsylvania	46,086	921,720	460,860	460,860	92,172	829,548	20.0	921,720	460,860	460,860
Rhode Island	1,545	30,900	15,450	15,450	3,090	27,810	20.0	30,900	15,450	15,450
South Carolina	32,240	644,800	322,400	322,400	64,480	580,320	20.0	644,800	322,400	322,400
South Dakota	139,939	2,798,780	1,399,390	1,399,390	279,878	2,518,902	20.0	2,798,780	1,399,390	1,399,390
Tennessee	56,283	1,125,660	562,830	562,830	112,566	1,013,094	20.0	1,125,660	562,830	562,830
Texas	69,567	1,391,340	695,670	695,670	139,134	1,252,206	20.0	1,391,340	695,670	695,670
Vermont	9,612	192,240	96,120	96,120	19,224	173,016	20.0	192,240	96,120	96,120
Virginia	42,775	855,500	427,750	427,750	85,550	769,950	20.0	855,500	427,750	427,750
Washington	71,300	1,426,000	713,000	713,000	142,600	1,283,400	20.0	1,426,000	713,000	713,000
West Virginia	62,000	1,240,000	620,000	620,000	124,000	1,116,000	20.0	1,240,000	620,000	620,000
Wisconsin	65,498	1,309,960	654,980	654,980	130,996	1,178,964	20.0	1,309,960	654,980	654,980
Wyoming	97,986	1,959,720	979,860	979,860	195,972	1,763,748	20.0	1,959,720	979,860	979,860
Total	3,797,000	75,940,000	37,970,000	37,970,000	7,594,000	68,346,000	20.0	75,940,000	37,970,000	37,970,000

TABLE III.

TEMPERATURE (AT KARACHI).

Year.	January.		May.		July.		November.	
	Max- imum.	Min- imum.	Max- imum.	Min- imum.	Max- imum.	Min- imum.	Max- imum.	Min- imum.
1	2	3	4	5	6	7	8	9
1886	88	53	88	77	97	79	85	52
1887	81	41	82	76	89	75	82	48
1888	81	42	83	77	102	77	84	48
1889	83	40	100	77	85	77	86	48
1890	83	40	100	76	97	80	101	46
1891	83	42	119	78	85	78	100	47
1892	89	44	106	75	103	70	94	51
1893	89	43	118	78	103	73	96	50
1894	86	48	107	74	102	79	95	50
1895	81	43	102	75	100	81	95	53
1896	83	40	110	78	82	83	97	57
1897	83	40	101	85	84	80	92	60
1898	84	43	107	74	98	75	91	70
1899	78	35	93	64	89	70	85	66
1900	74	31	87	55	80	60	78	68
1901	75	32	88	54	88	61	79	65
1902	64	25	90	70	82	86	85	64
1903	74	30	97	85	82	85	81	76
1904	63	26	86	68	80	80	81	87
1905	85	54	90	81	85	84	91	

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TABLE IV.
POPULATION OF TOWNS (CENSUS OF 1911).

Towns.	Total.					Males.					Females.				
	1872.	1901.	1907.	1911.		1872.	1881.	1891.	1901.	1911.	1872.	1901.	1907.	1911.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Kanabha	56,712	79,500	116,000	151,300		54,664	45,543	56,700	66,400	91,250	51,800	68,300	48,277	61,070	
Kat Bahadur	..	..	..	1,734		..	..	..	1,194	1,000	..	..	..	642	
Kat	7,040	8,000	7,415	7,000		6,711	5,500	5,215	4,215	4,127	7,500	5,710	3,700	3,132	
Mahila	2,870	..	2,800	2,800		2,613	2,500	2,415	1,215	1,000	1,500	1,210	1,400	1,400	
Yara	7,031	8,800	10,700	11,600		6,300	5,500	5,215	4,215	4,127	7,500	5,710	3,700	3,132	
Total	75,323	91,312	140,000	179,000		65,375	55,543	64,315	72,710	99,397	69,310	80,224	59,417	73,000	

TABLE VI.
CASTE, TRIBE OR RACE (CENSUS OF 1911).

Caste, Tribe or Race enumerating under Class 10,000.	Name of Taluka and Mahal.													District Total.
	1	2	3	4	5	6	7	8	9	10	11	12	13	
	Baria	Kachh.	Mand. band.	Karawal.	Mirpur Taluk.	Patla	Chitwa Taluk.	Koti Mahal.	Mirpur Taluk.	Rajawal.	Jadh.	Shah- bandar.		
Urdu	6,887	6,887	6,432	72,480	23,140	9,170	2,410	764	6,086	2,806	2,205	2,543	111,382	
Lokan	6,217	6,217	3,777	22,125	1,895	8,407	2,264	646	1,903	1,627	1,666	1,561	47,783	
Mahr and unspecified	1,750	1,750	673	20,000	605	8,702	231	124	2,755	678	622	679	53,783	
Mandalas	33,254	33,254	17,409	101,253	32,862	17,306	25,228	1,069	22,714	30,860	27,240	27,307	292,353	
Aras	708	708	1,180	2,452	105	1,836	608	21	1,706	764	614	1,120	10,741	
Rajput	6,793	6,793	3,042	6,008	9,472	3,256	1,471	17	6,437	2,391	2,100	7,302	51,315	
Dravid	414	414	17	7,003	9,555	940	77	17	172	459	190	10	10,187	
Shakhs	301	301	308	10,210	5,011	2,865	15	70	4,012	396	79	302	30,600	
Shakhs	3,570	3,570	1,191	6,112	6,709	1,313	2,458	306	3,098	740	839	1,312	22,267	
Shakhs	18,441	18,441	6,094	21,020	12,420	20,026	10,883	330	11,009	15,695	21,308	11,067	125,799	
Shakhs	2,803	2,803	1,10	5,206	8,164	6,034	6,450	202	8,203	11,918	6,568	6,018	65,538	
Mahr and unspecified	1,062	1,062	518	20,420	1,122	12,716	704	18	624	1,159	1,402	805	20,914	

* Including Karal, Magal and Unfrail treated in the census returns as tribes distinct from Baluch and named Karal, Magal and Munzil.

TABLE VII.

DISTRIBUTION OF LAND AND CROPS.

Particulars.	1880-1881.	1890-1891.	1900-1901.	1910-1911.	1915-1916.
1	2	3	4	5	6
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Total area for which statistics are available		4,262,318	7,081,270	7,720,120	7,516,482
Not available for cultivation	Not recorded.	2,310,290	3,790,411	3,703,477	3,652,693
A—Forest lands		99,652	150,704	154,545	162,532
B—Others		3,110,638	3,639,707	3,548,932	3,490,161
Available for cultivation		1,952,028	3,290,859	4,016,643	3,863,789
A—Uncultivated		507,832	1,176,024	1,258,808	830,847
B—Occupied		1,444,196	2,114,835	2,757,835	3,032,942
(1) Current fallows		223,120	384,007	672,000	498,340
(2) Not area cropped during the year		660,610	261,251	404,888	315,212
A—Irrigated		261,251	261,251	311,458	280,172
By canals		261,251	261,251	279,686	254,369
By wells				110	36
Direct from rivers	Not recorded.			110	
B—On virtual and hill slopes		37,969	12,821	93,430	10,040
Crops.					
Cereals		3,008,211	3,238,751	3,338,441	3,290,697
Wheat		13,315	14,300	35,638	6,100
Rice		24,051	23,794	28,320	10,612
Paddy		124,852	167,214	211,380	242,180
Wheat		2,250	5,770	8,074	9,638
Barley		2,160	7,400	2,061	10,386
Other cereals		1,311	2,230	2,090	2,007
Pulses		12,600	25,140	28,110	20,090
Green gram		10,894	17,618	18,730	10,182
Black gram			2,005	2,004	4,005
Other pulses			542	1,376	1,741
Chickling vetch		1,700	2,000	3,790	3,813
Other pulses				2,122	536
Tobacco		100	194	87	54
Sugarcane		873	1,065	303	900
Oil-seeds (not forest)		34,100	26,335	13,013	20,443
Mustard			3,354	1,364	6,182
Flax			8,800	2,801	2,710
Other oil-seeds			14,181	1,848	1,549
Fibre		210	201	167	77
Cotton		190	328	110	39
Other fibres		20	103	39	7,554
Orchard and garden produce		3,800	10,104	7,001	130
Condiments and spices			457	248	
Dye (not forest)			24		
Medicines			6		10
Drugs and narcotics other than tobacco					
Minerals		21,377	1	14,551	20,823
Total crop		300,300	300,000	343,213	330,848
Low area twice cropped		9,000	22,500	20,790	21,624
Actual area cropped		290,810	277,500	322,423	309,224

* Details not available.

TABLE VIII.

DOMESTIC ANIMALS AND AGRICULTURAL STOCK.

Cattle and other quadrupeds.	1880-1881.	1890-1891.	1900-1901.	1910-1911.	1915-1916.
1	2	3	4	5	6
Cattle—					
Plough cattle	37,923	33,611	45,693	55,755	42,327
Bulls for breeding purposes	1,628	1,330	2,149	3,699	3,440
Oxen and buffalo for other purposes	5,474	3,961	3,311	1,053	3,709
Wool cattle	43,414	31,107	1,12,416	100,153	102,090
Young stock	22,085	27,366	27,784	41,321	59,214
Total of Cattle	109,524	100,375	204,453	203,341	221,090
Others—					
Horses or ponies	7,350	7,500	9,795	8,243	7,846
Sheep	45,917	49,215	49,342	46,908	49,328
Goats	28,481	30,551	70,277	72,000	50,848
Camels	8,237	8,723	12,803	14,112	12,758
Mules	—	18	14	8,371	28
Donkeys	7,126	7,399	9,091	110	11,400
Total	117,001	123,417	146,322	146,716	154,744
Younger Cattle	75,599	16,617	24,009	19,000	22,923
	642	712	523	1,136	1,564

TABLE IX.

SOURCES OF WATER SUPPLY DURING THE YEAR 1915-1916.

Taluka and Mahal.	Number of wells for	
	Irrigation.	Other purposes.
Kotri	1	22
Merchant Mahal	4	21
Kumbhar Mahal	5	1
Kaneshi	12	12
Tatta	—	12
Mirpur Sakre	3	15
Ohankari	—	4
Mirpur Badinoo	26	26
Sujawal	1	23
Jaul	1	23
Shahbunder	2	19
Total for District	54	205

TABLE

IRRIGATION

Particulars.	1870-1871.			1880-1881.			
	Area irrigated.	Receipts.	Expenditure.	Area irrigated.	Receipts.	Expenditure.	Area irrigated.
1.	2.	3.	4.	5.	6.	7.	8.
I.—Works for which Capital and Revenue Accounts are kept.							
	Acres.	Rs.	Pcs.	Acres.	Rs.	Pcs.	Acres.
Capital entry up to 1915-16.							
1. *Nuttah canal		Rs. 1,30,079					
II.—Works for which only Revenue Accounts are kept.							
1. Canals north of Kotri	10,820	15,621	8,911	12,506	24,445	8,450	8,402
2. Faisal canal							2,442
3. Canals in Talha, &c.	8,430	25,436	4,279	8,154	60,817	4,210	12,109
4. Kahr canal	6,724	20,365	2,514	9,904	21,539	12,024	12,138
5. Other canals, Fuleli (Mudband)	14,547	43,000	17,74	17,222	28,028	16,397	21,214
6. Baghar canal	18,151	27,552	3,428	17,941	26,128	2,825	26,082
7. Works included in item 4 for 1915-16	17,472	66,444	501	19,798	59,004	1,400	12,019
8. Canals in Mirpur Bathora	5,299	17,817	9,824	5,400	20,298	3,824	10,168
9. Pinyari	56,402	1,40,378	17,082	51,722	1,16,122	64,346	70,229
10. Canal in Bahawal	9,559	22,324	4,529	5,502	12,450	2,940	7,652
11. Canals in Jell	1,549	4,371	844	1,502	4,412	2,190	2,200
12. Sattah	2,354	24,181	2,000	6,237	16,227	1,422	10,542
13. Canals in Shikhan	4,104	8,240	1,790	2,129	4,712	1,124	2,398
14. Khanda	6,000	14,271	2,597	4,834	11,222	1,654	2,540
15. Kikawari	2,200	14,046	4,014	12,981	20,722	2,440	12,627
III.—Works for which neither Capital nor Revenue Accounts are kept.							
1. † Mandband lands							
2. Banks, Right Bank	501	240	2,000	594	1,000	18,197	594
3. Banks, Left Bank	840	1,000	2,000	1,000	2,019	22,000	1,000

* Included under sub-class 1 in 1901-02.

† Jaggir canals taken over by Government.

‡ The figures are for all "other canals of Fuleli district," out of

§ Figures for 1870-71, 1880-81, 1890-91 and

Note.—The figures for "Fuleli (Gala) canal," which was for the most part in the

TABLE XI.
TAKAVI ADVANCES AND COLLECTIONS.

Year.	Land Improvement Loans Act, 1882.		Agriculturists' Loans Act, 1884.	
	Advances.	Collections.	Advances.	Collections.
1.	2.	3.	4.	5.
1885-1886	Rs. 18,885	Rs. 5,344	Rs. 65,155	Rs. 62,255
1886-1887	18,963	10,889	58,200	42,720
1887-1888	.....	11,792	.....	51,549
1888-1889	26,122	7,694	53,183	33,705
1889-1890	29,297	14,712	1,17,323	49,086
1890-1891	31,979	29,583	64,892	53,332
1891-1892	29,969	13,891	66,824	44,213
1892-1893	38,115	14,274	60,780	35,677
1893-1894	5,089	24,517	16,120	54,540
1894-1895	14,730	24,556	22,562	42,451
1895-1896	9,265	18,774	21,906	42,117
1896-1897	22,740	19,874	30,255	1,25,920
1897-1898	27,023	10,564	42,186	29,619
1898-1899	29,830	11,726	1,22,040	17,023
1899-1900	21,470	21,613	48,305	79,790
1900-1901	80,750	17,671	68,025	46,781
1901-1902	For both Acts together.		54,864	1,31,056
1902-1903	Do.	Do.	1,11,185	1,48,618
1903-1904	Do.	Do.	1,50,027	1,20,477
1904-1905	Do.	Do.	1,21,020	1,45,910
1905-1906	Do.	Do.	91,930	1,30,230

Note.—Separate figures for the two Acts have not been kept since 1901-1902.

TABLE XII.
PRICES IN SHEER (80 TOLAS) PER RUPEE AND WAGES (AT KARACHI).

Year.	Wheat.	Rice.	Diap.	Purra.	Neam.	Ball.	Masoor.	Cap- paster.	Alto- bottled agricul- tural labourer.	Soyas or Semen- langer.
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1899	11	10	13	19	12	14				
1900	9	8	10	11	9	14				
1901	10	11	12	17	12	14				
1902	10	10	12	19	13	14				
1903	11	10	10	10	10	14				
1904	9	9	10	13	9	13				
1905	12	11	14	19	14	18				
1906	12	11	16	19	16	18				
1907	12	11	16	19	16	18				
1908	11	11	14	18	16	18				
1909	11	10	12	14	12	18				
1910	11	9	10	16	10	18				
1911	10	10	11	12	12	18				
1912	9	9	9	9	11	17				
1913	9	11	10	12	12	17				
1914	9	7	10	12	11	15				
1915	9	7	9	11	10	15				

Note 1.—Prices during the last fortnight of March.

Note 2.—Wages which differ from those contained in published statements are taken from a report specially compiled by the Municipality of Karachi. The average monthly earnings of a labourer must not be taken as 30 times the daily wage here shown. Allowance must be made for Fridays, holidays and periods of idleness.

TABLE XIII.

FAMINE.

No famine has affected the district during the past 20 years, but famine-stricken immigrants from districts beyond Sind flocked into the town of Karachi in some years in search of employment, and the extent to which they were afforded relief is shown below:—

Particulars.	1898-1897.	1899-1900.	1900-1901.	1901-1902.
1.	2.	3.	4.	5.
1. Average number of persons relieved daily during the year	19	27	7	2
2. Expenditure	Rs. 537	Rs. 2,142	Rs. 303	Rs. 129

TABLE XIV.
FOREST STATISTICS.

Particulars.	1894-1895.		1895-1896.		1900-1901.		1910-1911.		1915-1916.	
	Sq. A.	Sq. M.	Sq. A.	Sq. M.	Sq. A.	Sq. M.	Sq. A.	Sq. M.	Sq. A.	Sq. M.
1. Area—Reserved Properties	122	247	183	507	229	474	212	222	243	408
Total	122	247	183	507	229	474	212	222	243	408
2. Timber products—		Rs.		Rs.		Rs.		Rs.		Rs.
(1) Teak	..	67,137	..	1,59,715	..	25,288	..	12,409	..	20,729
(2) Sheesham	..	11,915	..	17,400	..	6,040	..	49,006	..	21,679
(3) Graining	..	6,927	..	6,979	..	5,095	..	7,547	..	12,314
(4) Baked poles	..	..	..	..	..	400	..	5,095	..	9,981
(5) Lac	..	19,213	..	5,322	..	5,495	..	5,417	..	6,159
(6) Other products	..	1,02,493	..	1,98,447	..	53,179	..	31,279	..	90,058
3. Receipts	..	96,928	..	1,10,403	..	32,325	..	45,015	..	45,759
4. Expenditure	..	1,176	..	6,179	..	4,095	..	4,095	..	4,095
5. Area of plantation	..	11,546	..	6,125	..	12,167	..	8,074	..	9,329
6. Area closed to grazing	..	..	..	..	..	..	..	..	..	4,004

Note 1.—The figures in the first three columns are for the old Karachi district which included Sukkur, Jedd and Datta tankas, now belonging to the Larkana district.

Note 2.—Receipts and expenditure on account of irrigation, working plans and forest sanitary surveys are not accounted for in the statement.

TABLE XV.
PREVIOUS AND CURRENT SETTLEMENTS.

Taluka and Mahal.	Description.	Period.	Average area owned.	Average yearly assessment.	Average rate per acre.	Date of introduction.	No. of groups.	Classification.				Total area by Dow.
								Standard.	Other Dow.	Low.	High.	
Taluka and Mahal.	Mawla.	1885-86 to 1889-90	61,780	10,375	16.6	1886-87	14	11	12	13	14	15
	Brigade.	1889-90 to 1890-91	6,315	1,015	16.1	1890-91	14	11	12	13	14	15
	This mahal is in per year.											
	Brigade.	1890-91 to 1901-12	12,145	1,834	15.1	1901-12	14	11	12	13	14	15
	Brigade.	1902-03 to 1905-06	26,700	4,014	15.0	1905-06	14	11	12	13	14	15
	Brigade.	1906-07 to 1909-10	25,154	3,700	14.7	1909-10	14	11	12	13	14	15
	Brigade.	1910-11 to 1913-14	38,922	5,700	14.7	1913-14	14	11	12	13	14	15
	Brigade.	1914-15 to 1917-18	32,081	4,700	14.7	1917-18	14	11	12	13	14	15
	Brigade.	1918-19 to 1921-22	30,008	4,400	14.7	1921-22	14	11	12	13	14	15
	Brigade.	1922-23 to 1925-26	31,508	4,600	14.7	1925-26	14	11	12	13	14	15

* In unimproved lands, the rate for "sand harvest" is Rs. 10-12-0 per acre.
 † The Band Vindh taluqa which was formerly unimproved but now been surveyed and brought into cultivation from 1914-15-16 onwards about four-fifths of the whole.
 ‡ Kori taluqa, first as its cultivation depends entirely on rainfall, the following rate of assessment was fixed there:—
 Sand 10-12-0 per acre.
 Kori 10-12-0 per acre.

TABLE XVI.
CRIMINAL JUSTICE.

Offences.	Persons convicted or found free in		
	1913.	1914.	1915.
1	2	3	4
1. Offences against public tranquillity	298	304	345
2. Murder	16	15	17
3. Culpable homicide	1	13	3
4. Rape	2		
5. Hurt, criminal force and assault, including grievous hurt	163	228	217
6. Dacoity and robbery	45	15	26
7. Theft, including cattle theft	427	594	602
8. Other offences against the I. P. C.	424	309	549
9. Bad blood	61	45	45
10. Police	425	1,354	1,490
11. Salt Law	7	12	14
12. Excise	25	12	17
13. Forest	49	29	20
14. Stamp		1,798	1,900
15. Municipal	2,041	1,368	1,602
16. Other offences			
Total	5,557	6,867	8,775

TABLE XVII.
WORK OF THE CRIMINAL COURTS.

Class of Court.	Number of persons tried in		
	1913.	1914.	1915.
1	2	3	4
Original.			
Persons tried by—			
Subordinate Magistrates	6,091	5,037	1,674
District, Sub-Divisional and 1st Class Magistrates	7,196	9,537	8,831
Court of Session	48	101	98
Total	9,275	11,641	10,803
Appellate.			
Number of appellants to District and Sub-Divisional Magistrates	73	37	34
Number of appellants to Court of Session	220	237	265
Total	228	254	299
Revisional.			
Number of applicants for revision to District Magistrate		4	2
Number of applicants for revision to Court of Session	18	50	52
Total	18	54	54
GRAND TOTAL	9,693	12,017	11,157

TABLE XVIII.
CIVIL JUSTICE.

Year.	Original.								Appeals.	
	Number of suits brought in						Value of suits brought in		Total number of appeals	
	*Subordinate Judge's Courts.			District Judge's Court.			Subordinate Judge's Courts.	District Judge's Court.	From districts.	Mysore & Coorg.
	For money or moveable property.	Title or other suits.	Total.	For money or moveable property.	Title or other suits.	Total.				
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1912	5,756	88	5,844	222	131	353	Rs. 2,00,770	Rs. 6,65,012	1	..
1911	6,514	79	6,593	278	200	478	2,82,000	16,84,086	7	9
1910	6,003	106	6,109	290	249	539	1,74,330	21,10,780	5	1

* Includes figures for the Courts of South Canara and the court of Katschi.

TABLE XIX.
REGISTRATION.

Year.	Registration offices.	Auction, immovable property.			* Auction, moveable property.			Total receipts.	
		Documents registered.	Value of property transferred.	Orders passed.	Documents registered.	Value of property transferred.	Orders passed.	Orders passed.	Extra Orders passed and fines.
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1906-07	14	2,419	25,13,659	8,775	171	23,731	6,005	2,502	..
1907-08	14	1,674	10,92,077	6,730	22	2,437	6,473	2,579	..
1908-09	14	2,166	10,15,724	6,419	33	2,577	6,730	2,700	..
1909-1900	14	2,226	10,44,804	6,742	68	2,557	7,034	2,729	..
1900-1901	14	2,517	11,43,150	7,095	64	2,717	7,967	2,806	..
1901-1902	12	1,120	16,35,134	4,594	77	2,776	8,002	2,741	..
1902	12	1,060	15,88,546	4,124	72	2,622	7,474	2,698	..
1903	13	1,099	14,37,294	4,245	70	2,631	7,455	2,729	..
1904	12	1,116	15,15,867	3,802	67	2,467	7,305	2,700	..
1905	11	1,206	15,02,581	3,544	47	2,477	6,850	742	..
1906	10	1,108	16,74,433	3,304	30	2,474	7,290	1,590	..
1907	10	1,071	16,86,185	3,160	64	2,333	6,895	1,590	..
1908	10	1,451	17,41,310	10,601	73	2,577	11,905	1,702	..
1909	10	1,329	17,71,805	11,002	72	2,606	12,405	1,707	..
1910	10	1,606	18,12,000	12,614	76	2,696	13,541	1,707	..
1911	10	1,782	18,48,908	12,641	74	2,704	13,828	1,667	..
1912	11	2,572	11,55,000	12,861	72	2,778	13,870	1,667	..
1913	11	1,816	12,47,238	12,567	70	2,606	13,000	1,523	..
1914	11	1,627	12,09,841	11,713	68	2,430	12,166	1,410	..
1915	12	1,718	12,09,471	11,602	75	2,511	12,943	1,500	..

Note 1.—Figures for the first 5 years include figures for the Lakshmi district, which was transferred to the Katschi district in 1901. The figures for the last 2 years are for the Katschi district as it stands at present.

Note 2.—Orders from 1902 are for calendar years, and for the preceding years, for the financial years. Figures for the months of January to March 1902 have been included in both years, 1901-02 and 1902.

TABLE XX.
DISTRIBUTION OF POLICE, 1915.

Police stations.	Inspectors.	Ser- geants.	Sub- in- spec- tors.	Head con- stablos.	Con- stablos.	Total.	Extra guards.	
							Officers.	Non- Off.
1	2	3	4	5	6	7	8	9
Kaati	1	1	2	6	41	51		
Masband	1	1	1	13	24	40		
Indrapur	1	1	1	4	17	24		
Jerruck	1	1	1	5	18	25		
Thana Bala Khoro	1	1	1	4	20	27		
Tatta	1	1	1	10	51	74		
Obanabesi	1	1	1	7	24	42		
Mirpur Sakro	1	1	1	9	37	48		
Mirpur Bander	1	1	1	5	19	25		
Mirpur Bulbani	1	1	1	3	42	54		
Jad	1	1	1	7	22	42		
Salas	1	1	1	4	39	50		
Salas	1	1	1	3	21	43		
Ladhu	1	1	1	2	32	35		
Khar	1	1	1	1	18	19		
Dei Thap	1	1	1	4	14	19		
Malir	1	1	1	19	211	241		
Karachi City	1	1	1	12	125	148		
Karachi Cantonment	1	1	1	21	52	74		
Karachi Harbour	1	1	1	40	267	307		
Karachi Headquarters	1	1	1	40	267	307		
Total	18	18	18	212	1,150	1,448		

SUMMARY FOR THE DISTRICT.

1. At 6 Police Stations*	1	1	2	6	29	158	191
2. At 71 out-posts	1	1	1	13	24	162	190
3. At district headquarters	1	1	1	13	105	240	270
4. At Taluka headquarters	1	1	1	14	48	166	224
5. Reserve	1	1	1	1	3	27	30
6. Total in district	1	1	1	1	1	220	265
Armed	1	1	1	1	1	701	874
Unarmed	1	1	1	1	1	424	161
Total	1	1	1	1	1	1,160	1,448
7. Rationed strength	1	1	1	1	1	1,160	1,448

* Exclusive of the 2 Police stations at District headquarters and 10 at Taluka headquarters and Mahal headquarters.

Note.—There are fifty 2 head constables and 9 constables for the Karmati detention camp and 1 head constable and 1 constable for the Pilgrims' camp.

TABLE XXI.

TALUKAS.

Taluk and name of taluk.	Acreage and value for		Tally average number of prisoners in															
	Males.	Females.	1896-1897.		1898-1899.		1900-1901.		1902-1903.		1904-1905.		1906-1907.		1908-1909.		1910-1911.	
	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.
Kanchi District.																		
Chittoor taluk.	511	17	609	799	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Chittoor taluk.	54	13	66	84	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Chittoor taluk.	128	32	249	401	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total ..	373	116	847	1201	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Note.—The figures for 1900 add the prisoners taken up by the taluk of Chittoor, which was then transferred to the Chittoor district.

TABLE XXII-A.

REVENUE DETAIL.

Kind or revenue realized.	1904-1905.	1905-1906.	1906-1907.	1907-1908.	1908-1909.	1909-1910.	1910-1911.	1911-1912.	1912-1913.	1913-1914.	1914-1915.	1915-1916.
1	2	3	4	5	6	7	8	9	10	11	12	13
Land revenue*	Rs. 12,25,019	Rs. 10,55,400	Rs. 10,00,416	Rs. 10,00,416	Rs. 10,00,416	Rs. 10,00,416	Rs. 10,00,416	Rs. 10,00,416	Rs. 10,00,416	Rs. 10,00,416	Rs. 10,00,416	Rs. 10,00,416
Buildings*	Rs. 2,00,000	Rs. 2,00,000	Rs. 2,00,000	Rs. 2,00,000	Rs. 2,00,000	Rs. 2,00,000	Rs. 2,00,000	Rs. 2,00,000	Rs. 2,00,000	Rs. 2,00,000	Rs. 2,00,000	Rs. 2,00,000
Industries*	Rs. 1,54,189	Rs. 1,54,189	Rs. 1,54,189	Rs. 1,54,189	Rs. 1,54,189	Rs. 1,54,189	Rs. 1,54,189	Rs. 1,54,189	Rs. 1,54,189	Rs. 1,54,189	Rs. 1,54,189	Rs. 1,54,189
Excise†	Rs. 6,43,123	Rs. 6,43,123	Rs. 6,43,123	Rs. 6,43,123	Rs. 6,43,123	Rs. 6,43,123	Rs. 6,43,123	Rs. 6,43,123	Rs. 6,43,123	Rs. 6,43,123	Rs. 6,43,123	Rs. 6,43,123
Local fund‡	Rs. 2,00,000	Rs. 2,00,000	Rs. 2,00,000	Rs. 2,00,000	Rs. 2,00,000	Rs. 2,00,000	Rs. 2,00,000	Rs. 2,00,000	Rs. 2,00,000	Rs. 2,00,000	Rs. 2,00,000	Rs. 2,00,000
Other sources*	Rs. 20,45,730	Rs. 21,01,475	Rs. 21,01,475	Rs. 21,01,475	Rs. 21,01,475	Rs. 21,01,475	Rs. 21,01,475	Rs. 21,01,475	Rs. 21,01,475	Rs. 21,01,475	Rs. 21,01,475	Rs. 21,01,475
Total	Rs. 24,20,774	Rs. 23,80,208	Rs. 23,80,208	Rs. 23,80,208	Rs. 23,80,208	Rs. 23,80,208	Rs. 23,80,208	Rs. 23,80,208	Rs. 23,80,208	Rs. 23,80,208	Rs. 23,80,208	Rs. 23,80,208
Kind of revenue realized.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.
1	2	3	4	5	6	7	8	9	10	11	12	13
Land revenue*	Rs. 6,57,734	Rs. 7,14,469	Rs. 7,14,469	Rs. 7,14,469	Rs. 7,14,469	Rs. 7,14,469	Rs. 7,14,469	Rs. 7,14,469	Rs. 7,14,469	Rs. 7,14,469	Rs. 7,14,469	Rs. 7,14,469
Buildings*	Rs. 2,57,255	Rs. 2,57,255	Rs. 2,57,255	Rs. 2,57,255	Rs. 2,57,255	Rs. 2,57,255	Rs. 2,57,255	Rs. 2,57,255	Rs. 2,57,255	Rs. 2,57,255	Rs. 2,57,255	Rs. 2,57,255
Industries*	Rs. 1,14,250	Rs. 1,14,250	Rs. 1,14,250	Rs. 1,14,250	Rs. 1,14,250	Rs. 1,14,250	Rs. 1,14,250	Rs. 1,14,250	Rs. 1,14,250	Rs. 1,14,250	Rs. 1,14,250	Rs. 1,14,250
Excise†	Rs. 7,49,250	Rs. 7,49,250	Rs. 7,49,250	Rs. 7,49,250	Rs. 7,49,250	Rs. 7,49,250	Rs. 7,49,250	Rs. 7,49,250	Rs. 7,49,250	Rs. 7,49,250	Rs. 7,49,250	Rs. 7,49,250
Local fund‡	Rs. 1,00,222	Rs. 1,00,222	Rs. 1,00,222	Rs. 1,00,222	Rs. 1,00,222	Rs. 1,00,222	Rs. 1,00,222	Rs. 1,00,222	Rs. 1,00,222	Rs. 1,00,222	Rs. 1,00,222	Rs. 1,00,222
Other sources*	Rs. 22,00,770	Rs. 21,00,000	Rs. 21,00,000	Rs. 21,00,000	Rs. 21,00,000	Rs. 21,00,000	Rs. 21,00,000	Rs. 21,00,000	Rs. 21,00,000	Rs. 21,00,000	Rs. 21,00,000	Rs. 21,00,000
Total	Rs. 73,09,250	Rs. 79,00,000	Rs. 79,00,000	Rs. 79,00,000	Rs. 79,00,000	Rs. 79,00,000	Rs. 79,00,000	Rs. 79,00,000	Rs. 79,00,000	Rs. 79,00,000	Rs. 79,00,000	Rs. 79,00,000

* The figures within these brackets are the collections at the treasury of the district, irrespective of the district for which they were collected, and will not agree with the district totals XXXIII, XXV, XXXI and XXIV, which show the revenues of the district.

† Particular villages may also and will not agree with table XXVII.

‡ Excludes of land revenue.

Note.—For a given figure for the financial year, the year to which the figure refers is the revenue year.

TABLE XXII-B.

REVENUE DETAILS BY TALUKAS FOR THE YEAR 1915-16.

Taluka and Subd.	Land revenue.	Stamp.	Income tax.	Excise.	Other sources.	Local fund.
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Kadi ..	22,542	8,158	2,200	..	..	3,562
Manjund Taluk ..	28,261	..	1,538	..	..
Kachhan Taluk ..	574	190	87	..	..
Karnal ..	27,947	10,103	3,125	..	..	2,110
Mirpur Khas ..	41,904	1,501	1,044	..	..	2,470
Tatta ..	61,147	8,109	7,791	..	..	2,438
Libanwali ..	..	1,851	1,457	..	..	1,800
Koti Bander Taluk ..	..	..	582	..	..	..
Mirpur Mathura ..	1,14,577	2,344	1,850	..	..	4,904
Wapasi ..	50,251	2,504	2,059	..	..	2,890
Jail ..	50,340	1,428	1,400	..	..	2,282
Shahmadr ..	21,432	1,000	1,401	..	..	2,403
Total ..	7,22,940	3,85,472	5,22,008	6,475	4,50,000	20,172

Note.—Talukadar details in columns 2 and 3 are not available. Under Rs. 16,170 on account of Taluka Local Board receipts, Rs. 2,21,001 on account of District Local Board receipts.

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TABLE XXIII.
LAND REVENUE.

Particulars	1896-1896.	1896-1897.	1897-1898.	1898-1899.	1899-1900.	1900-1901.	1901-1902.	1902-1903.	1903-1904.	1904-1905.
1	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1. Net Land Revenue—										
(1) Arrears	51,219	55,577	42,604	53,002	58,128	68,274	1,30,520	5,17,102	2,46,608	2,37,847
(2) Current	7,84,179	7,80,012	9,25,504	6,17,308	6,09,879	6,12,461	3,98,748	2,75,808	6,16,616	7,00,010
(3) Total	8,35,398	8,35,589	9,68,108	8,70,310	8,78,007	10,80,735	10,27,278	9,43,001	10,63,224	10,10,867
2. Deductions—										
(1) Arrears	80,400	15,005	1,12,213	1,23,502	1,75,124	9,34,008	2,36,870	1,74,945	48,028	1,31,119
(2) Arrears irrecoverable	23,103	1,699	1,804	5,422	10,974	9,437	3,119	31,408	11,296	14,707
(3) Total	1,03,503	16,704	1,14,017	1,28,924	1,86,098	9,43,445	2,40,089	1,86,353	59,324	1,45,826
3. Net Demand—										
(1) Arrears	31,115	55,728	41,700	60,200	77,753	82,817	1,26,649	1,46,084	2,98,580	2,16,727
(2) Current	7,80,320	7,72,260	9,20,102	6,06,748	6,00,126	6,47,380	3,95,778	2,51,244	7,71,201	6,47,881
(3) Total	7,81,435	7,67,988	9,61,802	7,07,148	6,77,879	7,30,197	6,00,187	7,46,328	10,69,781	8,64,762
4. Collections—										
(1) Arrears	25,721	15,366	22,008	31,106	27,224	15,234	47,400	49,124	89,212	66,764
(2) Current	6,71,251	7,26,476	7,73,270	6,37,007	6,25,901	7,52,278	6,20,022	6,21,128	6,84,694	8,51,080
(3) Total	6,96,972	7,41,842	8,00,018	6,68,013	6,53,125	7,67,512	6,67,422	6,70,252	7,74,388	9,17,844
5. Balance—										
(1) Arrears	2,574	10,311	6,642	10,232	10,107	33,332	77,340	1,46,077	1,51,031	1,48,746
(2) Current	26,101	12,732	43,221	40,304	42,707	92,002	1,20,146	1,00,022	86,506	100,792
(3) Total	28,675	23,043	50,863	50,536	52,814	1,25,334	1,97,486	2,46,100	2,37,537	2,49,538

TABLE XXIV.
Exports.

Exported articles.	Receipts From	1899-00.	1900-01.	1901-02.	1902-03.	1903-04.
A		Rs.	Rs.	Rs.	Rs.	Rs.
A.—Imported liquors	1. Alcoholic liquors	10,000	10,000	10,000	10,000	10,000
B.—Liquors manufactured in India	2. Duty on spirits	500	500	500	500	500
C.—Country spirits and fermented liquors.	3. Duty on spirits	10,000	10,000	10,000	10,000	10,000
	4. Salt and duty	10,000	10,000	10,000	10,000	10,000
	5. Distillery and breweries tax	10,000	10,000	10,000	10,000	10,000
	6. Country spirit and fermented liquors	10,000	10,000	10,000	10,000	10,000
	Total	30,000	30,000	30,000	30,000	30,000
D.—Opium and its preparation	1. Duty	10,000	10,000	10,000	10,000	10,000
	2. License tax	10,000	10,000	10,000	10,000	10,000
	3. Gain on adulteration	10,000	10,000	10,000	10,000	10,000
	Total	30,000	30,000	30,000	30,000	30,000
E.—Drugs other than opium	1. Fees on permits	10,000	10,000	10,000	10,000	10,000
	2. License tax	10,000	10,000	10,000	10,000	10,000
	Total	20,000	20,000	20,000	20,000	20,000
F.—Miscellaneous	1. Abolition	10,000	10,000	10,000	10,000	10,000
	2. Opium	10,000	10,000	10,000	10,000	10,000
	Total	20,000	20,000	20,000	20,000	20,000
	Total Gross Revenue	1,00,000	1,00,000	1,00,000	1,00,000	1,00,000

TABLE XXV.
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Note.—The relative under the years 1860-90 (and 1902) is fully shown at the bottom of each page from which you transfer to the left-hand page.

TABLE XXVI-A.
INCOME TAX.

Year.	Part I— Salaries.		Part II— Compendia.		Part III— Scuritites.		Part IV— Other sources.		Total.	
	Assess- ment.	Net collec- tions.	Assess- ment.	Net collec- tions.	Assess- ment.	Net collec- tions.	Assess- ment.	Net collec- tions.	Assess- ment.	Net collec- tions.
1	2	3	4	5	6	7	8	9	10	11
		Rs.		Rs.		Rs.		Rs.		Rs.
1885-1886	775	24,700	0	2,222	44	5,300	2,261	85,777	2,261	1,21,218
1886-1887	786	24,948	11	2,054	145	5,440	2,409	91,418	2,409	1,22,222
1887-1888	185	25,345	2	506	108	5,512	2,527	96,500	2,527	1,26,553
1888-1889	882	29,418	9	4,418	107	5,622	2,581	98,754	2,601	1,30,641
1889-1890	700	27,190	4	1,554	98	4,762	2,191	92,944	2,191	1,16,227
1890-1891	880	27,068	10	2,224	95	4,857	2,419	95,781	2,438	1,21,254
1891-1892	978	26,166	7	2,215	95	4,718	2,372	94,774	2,458	1,20,478
1892-1893	899	31,130	6	1,367	31	1,297	2,221	97,301	2,221	1,26,021
1893-1894	143	34,782	6	1,394	41	1,621	1,682	101,111	1,701	1,31,505
1894-1895	429	30,230	5	5,075	37	2,564	1,632	79,000	1,657	1,42,800
1895-1896	400	32,290	4	7,124	32	2,794	1,662	86,700	1,686	1,48,282
1896-1897	451	31,300	4	4,593	30	2,554	1,607	80,540	1,622	1,31,787
1897-1898	187	34,100	10	4,599	42	2,644	1,650	82,557	1,673	1,32,541
1898-1899	378	30,060	10	3,500	37	2,500	1,611	79,697	1,704	1,26,549
1899-1900	386	41,291	12	3,500	45	2,548	1,700	92,665	1,719	1,27,002
1900-1901	619	40,329	14	5,000	51	2,700	1,751	92,511	1,774	1,29,557
1901-1902	739	30,329	19	7,900	54	4,661	1,977	1,00,712	2,025	1,29,480
1902-1903	801	56,666	17	40,000	101	2,400	1,942	1,05,500	2,040	1,28,144
1903-1904	100	55,147	14	46,000	75	2,000	1,866	1,06,800	2,063	1,28,934
1904-1905	104	47,443	10	44,000	70	2,601	1,966	1,04,722	2,170	1,28,119
1905-1906	910	53,543	10	44,000	70	2,601	1,966	1,04,722	2,170	1,28,119

TABLE XXVI-B.
INCOME TAX: CLASSIFICATION OF INCOMES UNDER PART IV.

Year.	Incomes of Rs. 500—1,000.		Incomes of Rs. 1,000—1,500.		Incomes of Rs. 1,500—2,000.		Incomes (exceeding Rs. 2,000).		Total.	
	Assess- ment.	Net collec- tions.	Assess- ment.	Net collec- tions.	Assess- ment.	Net collec- tions.	Assess- ment.	Net collec- tions.	Assess- ment.	Net collec- tions.
1	2	3	4	5	6	7	8	9	10	11
		Rs.		Rs.		Rs.		Rs.		Rs.
1885-1886	1,444	19,158	479	10,821	180	6,441	380	24,800	2,400	63,777
1886-1887	1,551	22,255	432	10,910	187	6,790	410	24,847	2,401	61,810
1887-1888	1,324	14,185	322	9,594	171	6,411	380	24,474	2,220	58,600
1888-1889	2,212	12,401	429	9,238	172	6,027	330	20,222	2,180	78,704
1889-1890	1,188	12,401	421	4,504	170	6,446	390	22,250	2,180	82,942
1890-1901	1,890	16,214	474	10,000	165	1,714	440	25,014	2,410	96,770
1891-1902	1,205	12,750	411	9,322	210	7,007	440	44,070	2,570	84,774
1892-1903	1,205	12,750	411	9,322	210	7,007	440	44,070	2,570	84,774
1893-1904	1,205	12,750	411	9,322	210	7,007	440	44,070	2,570	84,774
1894-1905	1,205	12,750	411	9,322	210	7,007	440	44,070	2,570	84,774
1895-1906	1,205	12,750	411	9,322	210	7,007	440	44,070	2,570	84,774
1896-1907	1,205	12,750	411	9,322	210	7,007	440	44,070	2,570	84,774
1897-1908	1,205	12,750	411	9,322	210	7,007	440	44,070	2,570	84,774
1898-1909	1,205	12,750	411	9,322	210	7,007	440	44,070	2,570	84,774
1899-1910	1,205	12,750	411	9,322	210	7,007	440	44,070	2,570	84,774
1900-1911	1,205	12,750	411	9,322	210	7,007	440	44,070	2,570	84,774
1901-1912	1,205	12,750	411	9,322	210	7,007	440	44,070	2,570	84,774
1902-1913	1,205	12,750	411	9,322	210	7,007	440	44,070	2,570	84,774
1903-1914	1,205	12,750	411	9,322	210	7,007	440	44,070	2,570	84,774
1904-1915	1,205	12,750	411	9,322	210	7,007	440	44,070	2,570	84,774
1905-1916	1,205	12,750	411	9,322	210	7,007	440	44,070	2,570	84,774

TABLE XXVII-A.

Particulars.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I.—Receipts.										
Government Grants	50,000	40,000	37,500	37,500	44,700	53,000	54,000	51,410	55,700	55,000
Education	400	400	400	400	400	400	400	400	400	400
Medical	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Scientific and other (under survey)	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Grants-in-aid	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Gifts and other	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Contributions	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Grants	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Unassigned	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Total	54,000	44,000	41,000	41,000	48,000	57,000	58,000	55,000	59,000	59,000
II.—Expenditure.										
Administration	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Education	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Medical	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Scientific and other (under survey)	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Grants-in-aid	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Gifts and other	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Contributions	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Grants	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Unassigned	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Total	54,000	44,000	41,000	41,000	48,000	57,000	58,000	55,000	59,000	59,000

Figures for 1906-07 to 1909-10 are inclusive of the same tables of 1905-06, 1906-07, 1907-08, 1908-09, 1909-10, 1910-11, 1911-12, 1912-13, 1913-14, 1914-15, 1915-16.

Year to which referred.	Name of Municipality.	1900-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.
1.	2.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1902.	Karnal* ..	30,45,877	12,61,264	17,70,446	14,51,847	20,01,756	16,09,035	40,40,549	49,00,289	30,11,290	44,38,894	
	Expenditure ..	21,35,214	10,40,413	14,37,010	11,20,257	10,91,302	14,28,422	20,40,319	25,64,991	27,00,010	28,12,342	
1904.	Koll Bunkar ..	40,959	8,300	6,340	6,078	6,018	6,543	28,207	22,187	34,016	34,233	
	Expenditure ..	6,088	5,679	5,903	6,108	6,462	6,294	7,316	7,404	6,399	6,027	
1913-14.	Salai* ..	31,670	16,172	19,130	25,102	20,529	21,406	30,334	65,400	30,040	41,384	
	Expenditure ..	15,019	16,472	16,361	16,221	16,050	16,077	20,806	41,258	27,349	28,862	
1915.	Mandla ..	4,762	3,101	3,227	2,419	3,418	1,107	7,355	9,582	10,268	11,897	
	Expenditure ..	3,647	2,972	4,095	2,006	2,147	2,004	4,469	3,322	8,742	9,468	
1917.	Talja ..	33,006	21,121	22,214	20,965	28,452	12,797	86,598	97,170	90,094	78,121	
	Expenditure ..	28,324	19,429	31,002	22,290	30,001	12,218	73,212	75,491	68,922	62,822	



Gul Hayat Institute

B. Training schools	Institutions	Pupils	Male		Total	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119
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Class of Institutions.		1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.
		12	13	14	15	16	17	18	19	20	21	22
A.—Institutions.												
1. Arts colleges	Institutions	191	220	181	220	277	225	275	300	333	197	250
	Pupils .. { Male .. 0 Female .. 0	0	0	0	0	0	0	0	0	0	0	0
2. High schools	Institutions	1,622	1,716	1,725	1,616	1,612	1,155	1,156	1,103	1,351	2,426	2,311
	Pupils .. { Male .. 0 Female .. 0	0	0	0	0	0	0	0	0	0	0	0
3. Middle schools (English)	Institutions	285	262	327	227	302	272	419	767	600	559	592
	Pupils .. { Male .. 0 Female .. 0	0	0	0	0	0	0	0	0	0	0	0
4. Madrasah schools (Urdu)	Institutions	314	310	366	1,001	1,086	173	185	145	157	147	223
	Pupils .. { Male .. 0 Female .. 0	0	0	0	0	0	0	0	0	0	0	0
5. Primary schools	Institutions	2,584	2,305	2,411	2,225	2,651	2,623	2,510	2,580	2,580	2,580	2,580
	Pupils .. { Male .. 0 Female .. 0	0	0	0	0	0	0	0	0	0	0	0
(a) Government	Institutions	1,271	1,002	1,270	1,002	1,015	1,078	1,082	1,082	1,082	1,082	1,082
	Pupils .. { Male .. 0 Female .. 0	0	0	0	0	0	0	0	0	0	0	0
(b) Local board	Institutions	26	26	26	26	26	26	26	26	26	26	26
	Pupils .. { Male .. 0 Female .. 0	0	0	0	0	0	0	0	0	0	0	0
(c) Municipal	Institutions	26	26	26	26	26	26	26	26	26	26	26
	Pupils .. { Male .. 0 Female .. 0	0	0	0	0	0	0	0	0	0	0	0
(d) Aided	Institutions	26	26	26	26	26	26	26	26	26	26	26
	Pupils .. { Male .. 0 Female .. 0	0	0	0	0	0	0	0	0	0	0	0
(e) Unaided	Institutions	26	26	26	26	26	26	26	26	26	26	26
	Pupils .. { Male .. 0 Female .. 0	0	0	0	0	0	0	0	0	0	0	0
(f) Indigo zone	Institutions	26	26	26	26	26	26	26	26	26	26	26
	Pupils .. { Male .. 0 Female .. 0	0	0	0	0	0	0	0	0	0	0	0
Total Primary	Institutions	1,007	1,007	1,007	1,007	1,007	1,007	1,007	1,007	1,007	1,007	1,007
	Pupils .. { Male .. 0 Female .. 0	0	0	0	0	0	0	0	0	0	0	0
6. Training schools	Institutions	26	26	26	26	26	26	26	26	26	26	26
	Pupils .. { Male .. 0 Female .. 0	0	0	0	0	0	0	0	0	0	0	0
7. Technical and other special schools	Institutions	26	26	26	26	26	26	26	26	26	26	26
	Pupils .. { Male .. 0 Female .. 0	0	0	0	0	0	0	0	0	0	0	0

TABLE XXIX-B.

Total Public	Institutions	Public	Male	Female	Total
214	10,412	210	11,317	5,418	16,735
215	10,488	211	11,389	5,438	16,827
216	10,564	212	11,461	5,458	16,919
217	10,640	213	11,533	5,478	17,011
218	10,716	214	11,605	5,498	17,103
219	10,792	215	11,677	5,518	17,195
220	10,868	216	11,749	5,538	17,287
221	10,944	217	11,821	5,558	17,379
222	11,020	218	11,893	5,578	17,471
223	11,096	219	11,965	5,598	17,563
224	11,172	220	12,037	5,618	17,655
225	11,248	221	12,109	5,638	17,747
226	11,324	222	12,181	5,658	17,839
227	11,400	223	12,253	5,678	17,931
228	11,476	224	12,325	5,698	18,023
229	11,552	225	12,397	5,718	18,115
230	11,628	226	12,469	5,738	18,207
231	11,704	227	12,541	5,758	18,299
232	11,780	228	12,613	5,778	18,391
233	11,856	229	12,685	5,798	18,483
234	11,932	230	12,757	5,818	18,575
235	12,008	231	12,829	5,838	18,667
236	12,084	232	12,901	5,858	18,759
237	12,160	233	12,973	5,878	18,851
238	12,236	234	13,045	5,898	18,943
239	12,312	235	13,117	5,918	19,035
240	12,388	236	13,189	5,938	19,127
241	12,464	237	13,261	5,958	19,219
242	12,540	238	13,333	5,978	19,311
243	12,616	239	13,405	5,998	19,403
244	12,692	240	13,477	6,018	19,495
245	12,768	241	13,549	6,038	19,587
246	12,844	242	13,621	6,058	19,679
247	12,920	243	13,693	6,078	19,771
248	12,996	244	13,765	6,098	19,863
249	13,072	245	13,837	6,118	19,955
250	13,148	246	13,909	6,138	20,047
251	13,224	247	13,981	6,158	20,139
252	13,300	248	14,053	6,178	20,231
253	13,376	249	14,125	6,198	20,323
254	13,452	250	14,197	6,218	20,415
255	13,528	251	14,269	6,238	20,507
256	13,604	252	14,341	6,258	20,599
257	13,680	253	14,413	6,278	20,691
258	13,756	254	14,485	6,298	20,783
259	13,832	255	14,557	6,318	20,875
260	13,908	256	14,629	6,338	20,967
261	13,984	257	14,701	6,358	21,059
262	14,060	258	14,773	6,378	21,151
263	14,136	259	14,845	6,398	21,243
264	14,212	260	14,917	6,418	21,335
265	14,288	261	14,989	6,438	21,427
266	14,364	262	15,061	6,458	21,519
267	14,440	263	15,133	6,478	21,611
268	14,516	264	15,205	6,498	21,703
269	14,592	265	15,277	6,518	21,795
270	14,668	266	15,349	6,538	21,887
271	14,744	267	15,421	6,558	21,979
272	14,820	268	15,493	6,578	22,071
273	14,896	269	15,565	6,598	22,163
274	14,972	270	15,637	6,618	22,255
275	15,048	271	15,709	6,638	22,347
276	15,124	272	15,781	6,658	22,439
277	15,200	273	15,853	6,678	22,531
278	15,276	274	15,925	6,698	22,623
279	15,352	275	15,997	6,718	22,715
280	15,428	276	16,069	6,738	22,807
281	15,504	277	16,141	6,758	22,899
282	15,580	278	16,213	6,778	22,991
283	15,656	279	16,285	6,798	23,083
284	15,732	280	16,357	6,818	23,175
285	15,808	281	16,429	6,838	23,267
286	15,884	282	16,501	6,858	23,359
287	15,960	283	16,573	6,878	23,451
288	16,036	284	16,645	6,898	23,543
289	16,112	285	16,717	6,918	23,635
290	16,188	286	16,789	6,938	23,727
291	16,264	287	16,861	6,958	23,819
292	16,340	288	16,933	6,978	23,911
293	16,416	289	17,005	6,998	24,003
294	16,492	290	17,077	7,018	24,095
295	16,568	291	17,149	7,038	24,187
296	16,644	292	17,221	7,058	24,279
297	16,720	293	17,293	7,078	24,371
298	16,796	294	17,365	7,098	24,463
299	16,872	295	17,437	7,118	24,555
300	16,948	296	17,509	7,138	24,647
301	17,024	297	17,581	7,158	24,739
302	17,100	298	17,653	7,178	24,831
303	17,176	299	17,725	7,198	24,923
304	17,252	300	17,797	7,218	25,015
305	17,328	301	17,869	7,238	25,107
306	17,404	302	17,941	7,258	25,199
307	17,480	303	18,013	7,278	25,291
308	17,556	304	18,085	7,298	25,383
309	17,632	305	18,157	7,318	25,475
310	17,708	306	18,229	7,338	25,567
311	17,784	307	18,301	7,358	25,659
312	17,860	308	18,373	7,378	25,751
313	17,936	309	18,445	7,398	25,843
314	18,012	310	18,517	7,418	25,935
315	18,088	311	18,589	7,438	26,027
316	18,164	312	18,661	7,458	26,119
317	18,240	313	18,733	7,478	26,211
318	18,316	314	18,805	7,498	26,303
319	18,392	315	18,877	7,518	26,395
320	18,468	316	18,949	7,538	26,487
321	18,544	317	19,021	7,558	26,579
322	18,620	318	19,093	7,578	26,671
323	18,696	319	19,165	7,598	26,763
324	18,772	320	19,237	7,618	26,855
325	18,848	321	19,309	7,638	26,947
326	18,924	322	19,381	7,658	27,039
327	19,000	323	19,453	7,678	27,131
328	19,076	324	19,525	7,698	27,223
329	19,152	325	19,597	7,718	27,315
330	19,228	326	19,669	7,738	27,407
331	19,304	327	19,741	7,758	27,499
332	19,380	328	19,813	7,778	27,591
333	19,456	329	19,885	7,798	27,683
334	19,532	330	19,957	7,818	27,775
335	19,608	331	20,029	7,838	27,867
336	19,684	332	20,101	7,858	27,959
337	19,760	333	20,173	7,878	28,051
338	19,836	334	20,245	7,898	28,143
339	19,912	335	20,317	7,918	28,235
340	19,988	336	20,389	7,938	28,327
341	20,064	337	20,461	7,958	28,419
342	20,140	338	20,533	7,978	28,511
343	20,216	339	20,605	7,998	28,603
344	20,292	340	20,677	8,018	28,695
345	20,368	341	20,749	8,038	28,787
346	20,444	342	20,821	8,058	28,879
347	20,520	343	20,893	8,078	28,971
348	20,596	344	20,965	8,098	29,063
349	20,672	345	21,037	8,118	29,155
350	20,748	346	21,109	8,138	29,247
351	20,824	347	21,181	8,158	29,339
352	20,900	348	21,253	8,178	29,431
353	20,976	349	21,325	8,198	29,523
354	21,052	350	21,397	8,218	29,615
355	21,128	351	21,469	8,238	29,707
356	21,204	352	21,541	8,258	29,799
357	21,280	353	21,613	8,278	29,891
358	21,356	354	21,685	8,298	29,983
359	21,432	355	21,757	8,318	30,075
360	21,508	356	21,829	8,338	30,167
361	21,584	357	21,901	8,358	30,259
362	21,660	358	21,973	8,378	30,351
363	21,736	359	22,045	8,398	30,443
364	21,812	360	22,117	8,418	30,535
365	21,888	361	22,189	8,438	30,627
366	21,964	362	22,261	8,458	30,719
367	22,040	363	22,333	8,478	30,811
368	22,116	364	22,405	8,498	30,903
369	22,192	365	22,477	8,518	30,995
370	22,268	366	22,549	8,538	31,087
371	22,344	367	22,621	8,558	31,179
372	22,420	368	22,693	8,578	31,271
373	22,496	369	22,765	8,598	31,363
374	22,572	370	22,837	8,618	31,455
375	22,648	371	22,909	8,638	31,547
376	22,724	372	22,981	8,658	31,639
377	22,800	373	23,053	8,678	31,731
378	22,876	374	23,125	8,698	31,823
379	22,952	375	23,197	8,718	31,915
380	23,028	376	23,269	8,738	32,007
381	23,104	377	23,341	8,758	32,099
382	23,180	378	23,413	8,778	32,191
383	23,256	379	23,485	8,798	32,283
384	23,332	380	23,557	8,818	32,375
385	23,408	381	23,629	8,838	32,467
386	23,484	382	23,701	8,858	32,559
387	23,560	383	23,773	8,878	32,651
388	23,636	384	23,845	8,898	32,743
389	23,712	385	23,917	8,918	32,835
390	23,788	386	23,989	8,938	32,927
391	23,864	387	24,061	8,958	33,019
392	23,940	388	24,133	8,978	33,111
393	24,016	389	24,205	8,998	33,203
394	24,092	390	24,277	9,018	33,295
395	24,168	391	24,349	9,038	33,387
396	24,244	392	24,421	9,058	33,479
397	24,320	393	24,493	9,078	33,571
398	24,396	394	24,565	9,098	33,663
399	24,472	395	24,637	9,118	33,755
400	24,548	396	24,709	9,138	33,847
401	24,624	397	24,781	9,158	33,939
402	24,700	398	24,853	9,178	34,031
403	24,776	399	24,925	9,198	34,123
404	24,852	400	24,997	9,218	34,215
405	24,928	401	25,069	9,238	34,307
406	25,004	402	25,141	9,258	34,399
407	25,080	403	25,213	9,278	34,491
408	25,156	404	25,285	9,298	34,583
409	25,232	405	25,357	9,318	34,675

TABLE XXIX-C.

EDUCATION: PUBLIC INSTITUTIONS AND SCHOLARS THEREIN
IN 1915-16.

Class of Institution.	Under the management of Government or Local Boards.				Under private management.				Total.	
	Managed by Government.		Managed by District or Municipal Boards.		Aided by Government or by District or Municipal Boards.		Unaided.			
	Institutions.	Scholars.	Institutions.	Scholars.	Institutions.	Scholars.	Institutions.	Scholars.	Institutions.	Scholars.
1	2	3	4	5	6	7	8	9	10	11
Arts colleges ..	1	—	—	—	1	256	—	—	1	256
High schools ..	—	437	—	—	—	—	—	—	—	437
Middle schools (English) ..	—	—	—	—	—	200	—	200	12	412
Middle schools (Vernacular) ..	—	—	—	—	—	—	—	—	—	—
Primary schools ..	29	144	105	2,011	132	6,624	1	100	270	17,664
Training schools ..	—	—	—	—	—	24	—	—	—	24
Technical and other special schools ..	—	—	—	—	—	23	4	111	6	164
Total ..	30	682	105	2,011	133	7,125	5	311	304	21,840

* Schools teaching through the medium of English.

† Schools teaching through the medium of a Vernacular.

TABLE XXIX-D.

EDUCATION: EXPENDITURE ON PUBLIC INSTRUCTION.

Total expenditure in 1915-16.

Class of Institution.	Provincial funds.	District funds.	Municipal funds.	Fees.	Revenues of Native States.	Subscriptions.	Endowments and all other sources.	Grand Total.
1	2	3	4	5	6	7	8	9
Arts colleges ..	Rs. 11,400	Rs. 7,500	Rs. 11,225	Rs. 24,000	—	—	Rs. 16,855	Rs. 72,480
Professional colleges ..	—	—	—	—	—	—	—	—
High schools ..	44,212	400	3,804	32,825	12,000	100	4,385	98,710
Middle schools (English) ..	7,717	218	4,445	10,018	—	4,177	4,201	31,259
Middle schools (Vernacular) ..	—	—	—	—	—	—	—	—
Primary schools ..	1,09,250	7,177	34,238	18,378	—	8,503	38,040	2,00,823
Training schools ..	2,050	—	700	—	—	—	1,445	4,200
Technical and other special schools ..	6,704	300	300	4,872	—	1,054	7,503	20,839
Total ..	1,81,349	12,701	73,531	66,113	12,000	12,500	74,813	4,54,813
Scholarships ..	1,511	5,214	1,714	70	—	300	4,081	10,901
Bursarships ..	23,000	20,000	6,000	11,000	—	3,450	6,500	79,000
Grand Total ..	2,05,860	37,915	81,245	77,183	12,000	16,250	85,394	5,42,813

* Includes classes attached to Arts colleges.

† Schools teaching through the medium of English.

‡ Schools teaching through the medium of a Vernacular.

§ Including inspection charges.

TABLE XXX-A.

VITAL STATISTICS FOR 20 YEARS.

Year.	Population under registration.	Births.		Deaths.		Deaths from						
		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.	Cholera.	Small-pox.	Fever.	Dysentery (diarrhoea).	Died from other phothis.	Typhus.	All other causes.
1900	12,407	31.32	28.22	10,260	82.70	24	21	8,319	67.80	300	175	1,341
1901	12,285	31.38	27.50	10,010	81.50	25	22	8,219	66.90	316	175	1,382
1902	12,010	32.01	26.54	9,750	81.10	27	21	8,008	66.50	324	175	1,382
1903	11,917	32.01	26.54	9,750	81.10	27	21	8,008	66.50	324	175	1,382
1904	11,848	32.40	26.54	9,750	81.10	27	21	8,008	66.50	324	175	1,382
1905	11,848	32.40	26.54	9,750	81.10	27	21	8,008	66.50	324	175	1,382
1906	11,848	32.40	26.54	9,750	81.10	27	21	8,008	66.50	324	175	1,382
1907	11,848	32.40	26.54	9,750	81.10	27	21	8,008	66.50	324	175	1,382
1908	11,848	32.40	26.54	9,750	81.10	27	21	8,008	66.50	324	175	1,382
1909	11,848	32.40	26.54	9,750	81.10	27	21	8,008	66.50	324	175	1,382
1910	11,848	32.40	26.54	9,750	81.10	27	21	8,008	66.50	324	175	1,382
1911	11,848	32.40	26.54	9,750	81.10	27	21	8,008	66.50	324	175	1,382
1912	11,848	32.40	26.54	9,750	81.10	27	21	8,008	66.50	324	175	1,382
1913	11,848	32.40	26.54	9,750	81.10	27	21	8,008	66.50	324	175	1,382
1914	11,848	32.40	26.54	9,750	81.10	27	21	8,008	66.50	324	175	1,382
1915	11,848	32.40	26.54	9,750	81.10	27	21	8,008	66.50	324	175	1,382

* Deaths from other causes in 1912 include one from a violent ailment.



Gul Hayat Institute

TABLE XXXI.
HOSPITALS AND DISPENSARIES (1915).

Serial No.	Name	Class	When opened	Expenditure	Average daily attendance	Number of patients treated during the year						
						1906	1907	1908	1909	1910	1911	1912
1		2	3	4	5	6	7	8	9	10	11	12
1	Karachi Civil Hospital	1	Not known	Rs. 52,000	1,016	1,600	1,403	2,420	1,801	1,077	1,047	1,047
2	S. W. B. K. Hospital	2	Do.	Do.	7,767	8,000	8,071	8,888	9,227	9,400	9,379	9,379
3	Lady Dufferin Female Hospital, Karachi	3	1907	20,710	30,000	400	1,427	1,120	4,814	7,200	7,014	7,014
4	Karachi Lying-in Dispensary	4	1911	2,111	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
5	Edgell Hindustani Dispensary, Karachi	5	1911	5,000	10,000	100	10,128	11,200	13,131	12,000	10,000	10,000
6	Jaffer Taku Dispensary, Karachi	6	Not known	2,571	10,000	11,000	7,850	10,100	12,700	21,507	10,184	10,184
7	Bandroon Dispensary, Karachi	7	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
8	Bandroon Dispensary, Karachi	8	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
9	Bandroon Dispensary, Karachi	9	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
10	Bandroon Dispensary, Karachi	10	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
11	Bandroon Dispensary, Karachi	11	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
12	Bandroon Dispensary, Karachi	12	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
13	Bandroon Dispensary, Karachi	13	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
14	Bandroon Dispensary, Karachi	14	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
15	Bandroon Dispensary, Karachi	15	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
16	Bandroon Dispensary, Karachi	16	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
17	Bandroon Dispensary, Karachi	17	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
18	Bandroon Dispensary, Karachi	18	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
19	Bandroon Dispensary, Karachi	19	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
20	Bandroon Dispensary, Karachi	20	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
21	Bandroon Dispensary, Karachi	21	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
22	Bandroon Dispensary, Karachi	22	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
23	Bandroon Dispensary, Karachi	23	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
24	Bandroon Dispensary, Karachi	24	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
25	Bandroon Dispensary, Karachi	25	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
26	Bandroon Dispensary, Karachi	26	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
27	Bandroon Dispensary, Karachi	27	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
28	Bandroon Dispensary, Karachi	28	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
29	Bandroon Dispensary, Karachi	29	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
30	Bandroon Dispensary, Karachi	30	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
31	Bandroon Dispensary, Karachi	31	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
32	Bandroon Dispensary, Karachi	32	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
33	Bandroon Dispensary, Karachi	33	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
34	Bandroon Dispensary, Karachi	34	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
35	Bandroon Dispensary, Karachi	35	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
36	Bandroon Dispensary, Karachi	36	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
37	Bandroon Dispensary, Karachi	37	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
38	Bandroon Dispensary, Karachi	38	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
39	Bandroon Dispensary, Karachi	39	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
40	Bandroon Dispensary, Karachi	40	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
41	Bandroon Dispensary, Karachi	41	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
42	Bandroon Dispensary, Karachi	42	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
43	Bandroon Dispensary, Karachi	43	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
44	Bandroon Dispensary, Karachi	44	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
45	Bandroon Dispensary, Karachi	45	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
46	Bandroon Dispensary, Karachi	46	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
47	Bandroon Dispensary, Karachi	47	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
48	Bandroon Dispensary, Karachi	48	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
49	Bandroon Dispensary, Karachi	49	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
50	Bandroon Dispensary, Karachi	50	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
51	Bandroon Dispensary, Karachi	51	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
52	Bandroon Dispensary, Karachi	52	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
53	Bandroon Dispensary, Karachi	53	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
54	Bandroon Dispensary, Karachi	54	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
55	Bandroon Dispensary, Karachi	55	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
56	Bandroon Dispensary, Karachi	56	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
57	Bandroon Dispensary, Karachi	57	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
58	Bandroon Dispensary, Karachi	58	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
59	Bandroon Dispensary, Karachi	59	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
60	Bandroon Dispensary, Karachi	60	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
61	Bandroon Dispensary, Karachi	61	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
62	Bandroon Dispensary, Karachi	62	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
63	Bandroon Dispensary, Karachi	63	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
64	Bandroon Dispensary, Karachi	64	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
65	Bandroon Dispensary, Karachi	65	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
66	Bandroon Dispensary, Karachi	66	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
67	Bandroon Dispensary, Karachi	67	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
68	Bandroon Dispensary, Karachi	68	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
69	Bandroon Dispensary, Karachi	69	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
70	Bandroon Dispensary, Karachi	70	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
71	Bandroon Dispensary, Karachi	71	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
72	Bandroon Dispensary, Karachi	72	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
73	Bandroon Dispensary, Karachi	73	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
74	Bandroon Dispensary, Karachi	74	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
75	Bandroon Dispensary, Karachi	75	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
76	Bandroon Dispensary, Karachi	76	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
77	Bandroon Dispensary, Karachi	77	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
78	Bandroon Dispensary, Karachi	78	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
79	Bandroon Dispensary, Karachi	79	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
80	Bandroon Dispensary, Karachi	80	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
81	Bandroon Dispensary, Karachi	81	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
82	Bandroon Dispensary, Karachi	82	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
83	Bandroon Dispensary, Karachi	83	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
84	Bandroon Dispensary, Karachi	84	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
85	Bandroon Dispensary, Karachi	85	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
86	Bandroon Dispensary, Karachi	86	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
87	Bandroon Dispensary, Karachi	87	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
88	Bandroon Dispensary, Karachi	88	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
89	Bandroon Dispensary, Karachi	89	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
90	Bandroon Dispensary, Karachi	90	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
91	Bandroon Dispensary, Karachi	91	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
92	Bandroon Dispensary, Karachi	92	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
93	Bandroon Dispensary, Karachi	93	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
94	Bandroon Dispensary, Karachi	94	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
95	Bandroon Dispensary, Karachi	95	1905	2,47	10,000	25	1,228	1,179	2,170	3,010	3,225	3,225
96	Bandroon Dispensary, Karachi	96	1905	2,47	10,000	25	1,228	1,179				

		III	1960	0.137 In-door	17	40	17	70	II	41	71	27
14	Muzar Railway	III	500	Out-door	17	2710	1720	1730	2005	2302	1340	2712
15	Thana Pula Khan	III	500	In-door	17	1000	1010	111	1724	1720	1340	2710
16	Yall discrepancy with branch at Jashin	III	1012	Out-door	17	1000	1010	111	1724	1720	1340	2710
17	Kaduna	III	1012	In-door	17	1000	1010	111	1724	1720	1340	2710
18	Mreya Jolas	III	1006	Out-door	17	1000	1010	111	1724	1720	1340	2710
19	Ngazun	III	1006	In-door	17	1000	1010	111	1724	1720	1340	2710
20	Manjharu	III	1012	Out-door	17	1000	1010	111	1724	1720	1340	2710
21	S. W. R. Lines, Karambaram	VI	1006	In-door	17	1000	1010	111	1724	1720	1340	2710

I—Miles, per mile. II—(VI) Miles, (per mile). III—Local transit and material per mile. IV—Private sales, (per mile). V—Railway, (per mile).



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15	Laillie	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000	11,000	12,000	13,000	14,000	15,000	16,000	17,000	18,000	19,000	20,000
16	Wingate	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000	11,000	12,000	13,000	14,000	15,000	16,000	17,000	18,000	19,000	20,000
17	Wingate	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000	11,000	12,000	13,000	14,000	15,000	16,000	17,000	18,000	19,000	20,000
18	Wingate	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000	11,000	12,000	13,000	14,000	15,000	16,000	17,000	18,000	19,000	20,000
19	Wingate	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000	11,000	12,000	13,000	14,000	15,000	16,000	17,000	18,000	19,000	20,000
20	Wingate	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000	11,000	12,000	13,000	14,000	15,000	16,000	17,000	18,000	19,000	20,000
21	Wingate	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000	11,000	12,000	13,000	14,000	15,000	16,000	17,000	18,000	19,000	20,000
22	Wingate	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000	11,000	12,000	13,000	14,000	15,000	16,000	17,000	18,000	19,000	20,000
23	Wingate	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000	11,000	12,000	13,000	14,000	15,000	16,000	17,000	18,000	19,000	20,000



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TABLE XXXII.

VACCINATION.

Particulars.	1902-03.	1903-04.	1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.
Successful vaccination	5,044 8,000 13,044	6,434 10,000 16,434	8,721 12,000 20,721	10,000 15,000 25,000	12,000 18,000 30,000	14,000 21,000 35,000	16,000 24,000 40,000	18,000 27,000 45,000	20,000 30,000 50,000	22,000 33,000 55,000	24,000 36,000 60,000	26,000 39,000 65,000	28,000 42,000 70,000	30,000 45,000 75,000
Unsuccessful vaccination	2,044 3,000 5,044	3,434 5,000 8,434	5,721 8,000 13,721	7,000 10,000 17,000	9,000 13,000 22,000	11,000 16,000 27,000	13,000 19,000 32,000	15,000 22,000 37,000	17,000 25,000 42,000	19,000 28,000 47,000	21,000 31,000 52,000	23,000 34,000 57,000	25,000 37,000 62,000	27,000 40,000 67,000
Total vaccination	7,088 13,000 21,088	9,868 15,000 25,868	14,442 20,000 34,442	19,000 25,000 44,000	23,000 31,000 54,000	25,000 37,000 62,000	29,000 43,000 72,000	33,000 49,000 82,000	37,000 55,000 92,000	41,000 61,000 102,000	45,000 67,000 112,000	49,000 73,000 122,000	53,000 79,000 132,000	57,000 85,000 142,000
Number of successful vaccinations per 1,000 of the population of the respective areas.	70.51 100.00 140.51	86.61 120.00 176.61	116.75 160.00 236.75	130.00 180.00 270.00	153.85 206.67 310.52	176.19 233.33 350.00	203.70 277.78 404.76	231.43 311.11 442.59	259.26 346.67 490.91	287.09 380.00 530.30	314.93 413.33 584.62	342.76 450.00 634.91	370.59 490.00 694.12	398.42 520.00 734.42

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TABLE XXXIII.

LOSS FROM AND DESTRUCTION OF WILD ANIMALS AND VENOMOUS SNAKES.

Year.	Loss from:				Destruction of:			
	Wild animals.		Snakes.		Tigers.	Leopards and panthers.	Wolves.	Snakes.
	Human beings.	Cattle.	Human beings.	Cattle.				
1	2	3	4	5	6	7	8	9
1896	1	200	75	10		4	25	37
1897	1	474	69	10		4	15	26
1898	1	425	44				11	45
1899	1	1,020	40			2	14	43
1900	1	1,005	30			3	38	32
1901	1	100	31	174			20	12
1902	1	73	20			1	9	24
1903	1	22	45				18	10
1904	1	222	22				30	34
1905	1	225	20			1	33	37
1906	1	168	20	1		1	34	37
1907	1	21	22			2	30	30
1908	1	407	21	29		1	55	60
1909	1	277	34	24		1	11	24
1910	1	40	27			1	12	27
1911	1	30	41			4	7	49
1912	1	24	24			4	2	32
1913	1	20	15	17		1	0	34
1914	1	0	42			1	0	34
1915	1	13	32			2	10	24

Gul Hayat Institute



Gul Hayat Institute

INDEX.

A

Administration, 50 to 52.
Agriculture, 13 to 17; agricultural stock, statistical table of, 129.
Alexander's Haven, identification of Karachi with, 57.
Ali Muhammad Khan walaud Ahmed Ali Khan, 11.
Ali Muhammad walaud Ibrahim Khan, 10.
Allah Binda walaud Jamal Khan, 10.
Amir Pir, Shrine of, 55.
Animals—Stock of domestic, Statistical table, 129.

B

Babe Island, 58.
Bajri cultivation, 16.
Bahadur, Shrine of at Lahori Buzhar, 65.
Baran river, 4.
Barley cultivation, 17.
Bhambhor, birth place of Sasul, 53.
Bhun, a saint—fair at the shrine of, 103.
Burfiati tombs, 103; 104.

C

Cantonments, 32; 33 and 64.
Cape Monze or Rao Munari, 1.
Carnations, 82 and 83.
Census details, 8.
Chickling Vetch cultivation, 17.
Christian population, 19.
Clifton, 57 and 65.
Climate, 5.
Colleges, D. J. Sind College, hostel and Engineering classes, 41 to 43.
Communications, 20 to 22.
Courts, Criminal and Civil, 20; Judicial Commissioner's, 63; work of, 136 and 137.
Crops, 16 and 17; Statistical table, 128.

D

Delta, 2; traffic in the, 22.
Dharaja, 53.
Dysentery, 40.
Docks, Khas walaud Sales Khan Malik, 10.

E

Education, 34 to 45; statistical table of literates, 129 and 134; of institutions and scholars, 156 to 160.
Edward VII, statue of the King Emperor, 71.

Ehri range of hills, 3.
Estim: Statistical tables, 144 and 145.

F

Fairs, Amir Pir, 56; Jhimpir, 55; Jhak, 58; Mughal and Bhin, 103; Pir Patho, 106.
Famine: statistical table, 133.
Fishes, 25.
Floods, 5.
Forests: statistical table, 133.
Fruit trees, 17.

G

Gaage at Kotri, highest readings of, 5.
Gharo creek, 53.
Ghori Bander, 53, 57 and 65.
Ghorabai taluka together with Koti Bander Malat, agriculture of, 14.
Ghulam Haidar Khan walaud Jan Md. Khan, 11.
Ghulata, Muhammad walaud Khuda Baksh, 10.
Gram cultivation, 16.

H

Habb river, 1; description of, 4.
Haid, Captain—murder of, 82.
Haid's Hill Quarries, 66.
Health, 46 to 49.
Hills, 2 and 3.
Hindus—population of, 10.
Hospitals—Civil Hospital at Karachi, 46 and 47; Eye Hospital of Seth Govardandas Motilal Mohatta, 48; Lady Dufferin Hospital, 48; N.W. Ry. Hospital Kotri, 48; statistical table, 164 to 167.
Hottano range of hills, 3.
Huntingdon—Rev. C.—grave of, at Jhak, 54.

I

Inayat Shah Sufi—shrine of, at Jhak, 58.
Income tax, statistical table, 147.
Industries, 23.
Irrigation, 18; statistical table, 130 and 131.

J

Jaiba, 27; statistical table, 138.
Jamal Khan walaud Miah Karmati, 10.
Jam Mural Ali Khan, 10.

Jam Panlou Karmali, 10.
Jam Tamachiji Mari, 54.
Jat tribe, 11.
Jati taluka, agriculture of, 13.
Jhimpir, 53 and 56.
Jinak. Roads in. a Military depot, 54.
Jhok, 56.
Jokhia tribe, 10.
Jouri cultivation, 16.
Judicial Commissioner's Court, 62.
Justice, 26 and 27: statistical tables of, Criminal Justice, 136; and Civil Justice, 137.

K

Kafer Kot, 55.
Kalachi Koo, i. e., old Karachi, 58.
Kalan Kot, 119.
Karachi: Municipality, 30; Cantonment, 32 and 64; various schools, 37 to 40; D. J. Sind College, 41 to 43; Newspapers, 43 and 44; Libraries, 44 and 45; Civil Hospital, 46 and 47; Eye Hospital, 48; Lady Dufferin Hospital, 48; R. C. Veterinary dispensary, 49; Commercial importance, of, 57; History of the growth, etc., of, by Seth Naomal, 58; Capture of, by Mir Fatahullah Khan Talpur, 59; Entrance of S. S. Welladay into the port and capture of the fort, 59; Manors, 60; Seamen's rest, 61; Napier Obelisk, 61; Hardings bridge, 62; Mercantile Clock Tower, 62; business quarter and McLeod Road, 62 and 63; Bunder Road, 63; Post and Telegraph Office, 63; Kachari Road, 63; Bouchon Market, 63; Max Dumas Hall, 63 and 72; Old Jail Quarters, 63; Khaliqina Hall, 63 and 72; Small Cause Court, 63; Tramways, 63 and 64; Minia Road, 63; Free Hall, 64 and 70; Stations of Queen Victoria and King Edward, 64 and 71; Sind Club, 64 and 72; Y. M. C. A., 64 and 74; Masonic Hall, 64 and 73; Holy Trinity Church, 64, 74 and 75; Gymkhana, 64 and 73; Victoria Road, 64; Elphinstone Street, 64; Civil Lines, 64; Empress Market, 64 and 79; Scotch Church, 64 and 76; Volunteer Hall, 64 and 72; Goa Portuguese Hall, 64 and 72; Artillery Mess House, 65 and 73; Napier and Lawrence Roads, 65; Zoological garden, 65 and 80; Soldiers' Bazaar, 65; Environs, 65; Clifton, 65; China creek, 65; Ghazi Sanitarium, 66; Honey-moon lodge, 66; Parsi Tower of Silence, 66; Hand's Hill Quarries, 66; Lyari river,

66; Water works, 67 and 68; Government House, 69; Parsi Gymkhana, 73; Railway Institute, 73; Widows' Home, 76; Methodist Church, 77; Roman Catholic Church, 77 and 78; Markets, 79 and 80; Victoria Museum, 80; Gardens, 80; to 82; Cemeteries, 82 and 83; Port, 83 to 90.
Karachi District—Position, area and Physical aspects, 1; Hills, 2 and 3; Rivers, 4; Roads, 5; climate, 5 and 6; Rainfall, 7; Population, 8 to 12; agriculture, 13 to 17; irrigation, 18; economic, 19; communications, Trade and Industries, 20 to 22.
Karachi taluka—agriculture of, 14.
Karmati tribe, 10.
Koti Bunder Port, 23; Municipality, 31; description of, 91; imports and exports, 91 and 92.
Khalifa Chakur, 82 and 83.
Khinhar range of hills, 2.
Khinhar Lake, 64.
Kohistan, 2.
Kotri, 5; Municipality, etc., 31; description of, 92 and 93.
Koti Allah Rakhio Shah, 93 and 94.
Koti division—Constitution and agriculture of, 14.

L

Lahori, 94.
Lahori Bunder, 94 and 95.
Laki, Hot Springs, 96; range of hills, 2.
Lands—Distribution of, statistical table, 129.
Land—Revenue—statistical table, 142, and 143.
Lopes Aayim—Hiranand's, at Mangho Pir, 104.
Libraries, 44 and 45.
Light Houses at Marawa and Cape Munde, 87.
Local Boards, 28 and 29; statistical tables, 148 to 151.
Lyari river, 5 and 66.

M

Magistrates—District Magistrate, Powers of, 26; Sub-Divisional Magistrates, 26; Benches of, 26; Mohiticker and Mahalkaris, Powers of, 26; Resident Magistrates, Power of, 26; special, 27.
Makli hills—tombs on, 113 to 117.
Malir river, 4.
Manjhaad Mahal—agriculture of, 14; growth of, 90.
Manjhaad Municipality, 31; Head-quarter of Mahal, 90.

Manora, Cantonment, 33; School, 37.
Markets, 79 and 89.
Mauripur Salt works, 96 to 99.
Mirpur Bathoro taluks, agriculture of, 16; description of, 99.
Mugger Pees or Mangho Pir—Hot Springs, 100 to 103; Lepes Asylum, 104.
Mughal bhin—Head-quarter of Jati taluka, 104 and 105.
Muhammad Sidiq walad Ghulam Hussain Malik, 11.
Municipalities, 29 to 31; statistical tables, 152 and 153.

N

Nandkot, 105.
Narero range of hills, 3.
Newspapers, 43 and 44.
Numria tribe, 19.

O

Oyster rocks, erosion of, 57.

P

Police, distribution of, statistical table, 138.
Population, 8 to 12; census details, 8; Proportion of sexes, 6; density, 9; Proportion of concentration in towns, 9; Migration, 9; Religion, 10; Predominant tribes, 10 to 12; statistical tables, 121 and 125.
Prices and wages, statistical table, 132.

R

Rabi crops, 16 and 17.
Rainfall, 7; statistical tables, 122 and 123.
Ranika-kot, 106.
Rarki, 107.
Rashid Khan walad Gawher Khan, 11.
Registration offices, 27; statistical table, 137.
Religions—Population according to, 10; statistical table, 126.
Revenue, 24; statistical tables, 140 and 141.
Rice cultivation, 10.
Rivers, 4.
Roads, 20 to 22.

S

Savile of Tatta and Lahi, various families of, 11 and 12.
Sambok range of hills, 3.
Samul—Capital of the Sama Jama, 118.

Sann Channel, 5.

Saria and Jambha cultivation, 17.

Schools—Primary, 34 and 35; Aided, 35; Municipal, 35; Local Boards, 36; Anglo Vernacular, 36; Madrasah; Humainy boys' school, 36; C. E. Z. M. S. School, Karachi, 37; N. J. High School, 37; Manzura School, 37; Pariah School, Karachi, 37; St. Mary's School, Kotri, 37; Pami girls school, Karachi, 37; Sind Madrasah, 38; Grammar School, Karachi, 39; St. Patrick's School, Karachi, 39; C. M. High School, Karachi, 40; St. Joseph's Convent School, Karachi, 40.

Sesame cultivation, 10.

Settlements—Previous and current statistical tables, 134 and 135.

Sexes—Proportion of, 8.

Shah Bandars, 1892; Roads in, 5, description of, 107.

Shah Bandar division, constitution and agriculture of, 13 and 14.

Siganda, Salt, deposits, 2; Port, 23 and 107 and 108.

Soldar Khan walad Sardar Khan Malik, 10.

Souhari Dhandi, 54.

Stamp, statistical table, 146.

Stajawal, 100.

Sumbok range of hills, 3.

T

Talari, advances and collections—statistical table, 122.

Tatta division—constitution and agriculture of, 13 and 14.

Tatta municipality, 31; foundation and importance of, 109 to 118.

Tatta taluka—agriculture of, 13.

Temperature, 6; statistical table, 124.

Thano Bala Khan, 119.

Towns population, 9; statistical table, 123.

Trade, 23 and 27.

Tramways, 65.

Tribes, 10 to 12; statistical table, 127.

V

Vaccination, statistical table, 168.

Vegetables, growth of, 17.

Vital, statistical tables, 161 and 162.

W

Wheat cultivation, 16.

Wild animals and venomous snakes, loss and destruction from, statistical table, 160.



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