Baluchistan District Gazetteer Series.

VOLUMES VII AND VII-A.

MAKRÁN AND KHÁRÁN.

Text and Appendices.



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Baluchistán District Gazetteer Series.

VOL. VII.

MAKRÁN.

TEXT AND APPENDICES

BY

R. HUGHES-BULLER, I.C.S.

"Thou showest me the road to Makrán, but what a difference there is between an order and its execution? I will never enter this country, as its name alone terrifies me."

The Lament of Sinán ibn Seláma, quoted in Major Sykes'
"Ten Thousand Miles in Persia."



BOMBAY: PRINTED AT THE TIMES PRESS.

1906.

PREFACE.

THE Gazetteer of Makran is the first of the series dealing with the divisions of the Kalat State, which is to be published under the orders of the Government of India.

Perhaps no part of Baluchistán possesses more interest, whether from the point of view of the historian or the ethnographist, than Makrán. It was famous in ancient history under the name of Gedrosia, and much was written about it in the days of the Caliphate by the Arab geographers. To the ethnographist, its importance lies in the fact that for several centuries it became the settlement of the Baloch previous to their migration eastward towards Kachhi and the Punjab. It still contains remnants of those races, the Korak and the Méds, which figure so prominently in the accounts given by Arab authors.

In 1892 Lord Curzon wrote: "Beluchistán comprises the Gedrosia, and parts of the Drangiana, of the ancients; and it is a significant illustration of the obscurity that has rarely lifted from these regions, and of the precarious political existence which till lately they enjoyed, that the words of Gibbon, written of a period 1,700 years ago, were equally applicable to their condition up till the middle of the century still unexpired:—

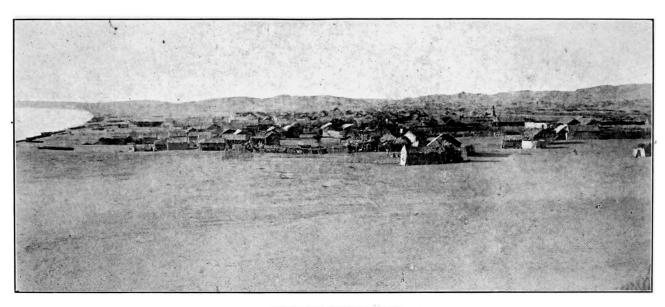
'We can scarcely attribute to the Persian monarchy the sea coast of Gedrosia or Macrán which extends along the Indian Ocean from Cape Jask to Cape Gwadel. In the time of Alexander, and probably many ages afterwards, it was thinly inhabited by a savage people of Ichthyophagi, who knew no arts, who acknowledged no master, and who were divided by inhospitable deserts from the rest of the world.'

"It is an extraordinary, but nevertheless a true fact, that from the time of Alexander's march through Gedrosia, and the navigation of his admiral Nearchus along its shores, we have no record of the visit of a European to the interior of Beluchistán until 1800."*

The obscurity noticed by Lord Curzon has now gradually lifted from the whole of Baluchistán. Owing, however, to its remote situation, Makrán has hitherto been the least known division of Kalát and, with the exception of Ross's Memorandum on Makrán and a few magazine articles, little has been published concerning it. In the present work an endeavour has been made to collate whatever published information is available and to supplement it with material gleaned from the country itself. For this purpose one of the Gazetteer assistants, Maulvi Abdur Rab, was deputed to Makrán, where he spent 14 months in investigating actual conditions in situ during 1903-04, and I am indebted to him for the local material included in the work.

The drafts were sent to Captain F. McConaghey, Assistant Political Agent, Makran, who kindly undertook to scrutinize them, and to whom I tender my acknowledgments for the assistance thus afforded.

QUETTA, December 1905.



BIRD'S EYE VIEW OF PASNI.

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MAKRAN

CHAPTER I.

DESCRIPTIVE.

MAKRAN is the south-western and maritime division Physical of the Kalát State in Baluchistán, lying between ASPECTS. 25° 1' and 27° 21' N, and 61° 39' and 65° 36' E, its area, including the Rakhshan and Raghai valleys, which belong to the Nausherwánis of Khárán, being about 26,600 square miles.

Generally speaking it is bounded on the north by the Boundaries. Siáhán range, which separates it from Khárán, on the east by the Ihalawan country and part of Las Béla, on the west by Persia, and on the south by the Arabian Sea. The northern boundary has never been actually defined, but it starts from a point near Kúhak in Persia and runs eastward, dividing the plain of Khárán from the valley of the Rakhshán river. According to local authorities the watershed forms the boundary, but at the south-west corner of the range, the most northerly point held by the Makrán authorities, is Grawag, while further eastward, although the Siáhán range forms the geographical boundary of Makrán as far as a point near Shíréza Kalát, the country from a point eastward of the Korkián pass, about east longitude 64° 20', is Nausherwáni country, and is, sometimes, regarded as part of Khárán. In the Rakhshán valley the exact limits of the Kháns and Nausherwáni area have never been settled, but for general purposes the boundary line may be assumed to be as follows. Starting from Grawag, it follows the watershed of the Koh-i-Sabz range as far as the Bibi Leri pass; the line from this point proceeds in a south-westerly direction to the Korkián pass and along the watershed of the Korkián hills. It then runs

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The northern part of the eastern boundary may be taken roughly as the watershed of the Koh-i-Patandar portion of the Central Makrán Range, and it follows this range south-westward to a point opposite to and west of Manguli-Kalát, where it takes a sudden turn eastward to include the north-eastern end of the Kolwa valley. Thence, following the range between Kolwa and Nondro, it crosses south-eastwards to the Mián Garr, which it follows, and proceeds southward across the Makrán Coast Range in the neighbourhood of the Hingol valley till it is crossed at right angles, probably near Hingláj, by the boundary of Las Béla, which here encloses a long strip of country in the neighbourhood of the coast.

The exact limit of this part of Las Béla on the west has long been a matter of dispute. So far back as 1862 it formed a matter of contention between the naib of Kéch and the Jám of Las Béla, the former claiming that Makrán extended to the Basol and the latter that the boundary of Las Béla ran as far as the Rumbar river. Sir F. Goldsmid. when engaged on an enquiry in that year regarding the local limits of the various tracts along the seaboard in connection with the erection of the Indo-European telegraph line, wrote on the point at issue: "My impression on informal, but as it appeared to me good evidence taken in the actual locality of dispute, was that the true boundary would be found in a line drawn from a point intermediate to the two places before named (i.e., the Basol and the Rumbar). I accordingly suggested in my English letter that Khor Kalmat should be held to be the terminus at the seaboard, and that the bed of the Makola hill stream should represent the prolongation inland." Eventually, as the matter was still under dispute, "Khor Kalmat or its vicinity" was entered in the agreement with the Jam of Béla as indicating the point to which the Jám's responsibility for the protection of the Indo-European wire extended.

[•] Letter No. 19, dated February 22, 1862, from Major Goldsmid to the Commissioner in Sind.

In 1904 the matter received the attention of Major Physical. Showers, Political Agent, Kalát, and the sandhill referred to by Major Goldsmid having been located as a small eminence 2 miles and 80 yards to the south-west from a point near Jihand-i-Chah on the Indo-European Telegraph line; the Local Government, in 1905, finally settled the boundary line as running south from this sandhill to the nearest point on Kalmat Hor, the inlet being divided from the point thus reached between the respective territories, the east shores being considered as Béla territory, and the west as Makrán.

The western boundary was defined on the map, but not demarcated, by a Joint Commission representing England, Persia and Kalát in 1871, Sir F. J. Goldsmid being the British representative. The proceedings of the Commission are referred to in the section on History. Commencing from the northernmost point, namely, that which is farthest from the sea on the Máshkél river, and immediately south of the Kúhak fort, the line runs almost due south to a point near Parom, from which place it turns westward, following the valley of the Nihing river. Near Mand it bends to the south and finally enters the sea on the right bank of the estuary of the Dasht river. The Kuhak district thus lies on the Persian side of the border at its northern end, while Panigúr, Parom and its dependencies, Zámurán, Buléda, Mand and Dasht lie in Kalát. In the plain country north of Gwetter bay, the line is drawn through the Drábol hill and between the rivers Báho and Dasht to the sea. The village of Gwetter lies on the Persian side.

On the south, the Makrán coast line extends from Kalmat to Gwetter bay, a distance as the crow flies of about 160 miles.

Makrán consists of two parts, to which the word makránát, the Makrans, has been applied by some writers. That situated in Baluchistán is generally known as Kéch Makrán to distinguish it from Persian Makrán. The derivation of the word Makran has been much discussed. Shams-ululama J. J. Modi, in an article published in East and West in May 1904, states that Hamzah gives it as a contracted form of Mah Kerán, from mah (town) situated on the shores of the sea (kerán). He also notices the derivation, given by Origin of Name.

PHYSICAL ASPECTS.

some Arab writers, from its alleged founder, Mokrán, son of Farek, son of Sám, son of Noah. Sir Thomas Holdich, Dr. Bellew, and Sir Oliver St. John consider it a corruption of the Persian, Mdhi khorán, i.e., fish-eaters, and point out that the Greeks in Alexander's time also called the people Ichthyophagoi also signifying fish-eaters. Lord Curzon says it is a Dravidian name, and that it appears as Mokara in the "Brihat Sanhita," of Varaha Mihira, in a list of the tribes contiguous to India on the west.* Major Sykes offers an entirely different derivation which he connects with the Sanscrit word aranya or irinya, signifying waste or swamp, and suggests that in Maka irina, the waste of Maka, he has traced the origin of this much debated word. In Sind, he states, the modern pronunciation is Makarán, exactly the expression of Maka irina.

Configuration and natural divisions.

Makrán differs from other parts of Baluchistán, except the State of Las Béla, in its possession of a fairly long line of seaboard. Inland, the general character of the country is mountainous and a study of the map indicates that the mountains cover by far the largest area in the country. They consist of three main ranges, traversing the country from east to west, the southernmost of which skirts the coast and may be called the Makran Coast Range; proceeding northward, the next range, occupying the centre of the country, is the Central Makran Range; while in the north, separating Makrán from Khárán, is the Siáhán Range. Between these great ranges lie valleys of varying width which form the natural divisions of the country. Those enclosed by the Makrán Coast Range on the south rise to a height of about 200 feet above sea level and may be called the southern or coast division, consisting of Gazdán, Kulánch, Gwádar and Gwádar-í-Nigwar, and Dasht and Nigwar lying in the valley of the Dasht river. The second or central division, enclosed between the Makrán Coast Range and the Central Makrán Range, consists of the Kéch valley from Mand to Oshap, lying at an elevation of about .500 feet with the subsidiary valleys of Buléda and Bálgattar which lie about 1,000 feet higher, and with its continuation in the plateau of Kolwa also at a higher level. division is distinguished by its great heat. The third and

[•] Persia, by Hon. G. Curzon, vol. II, p. 261, footnote.

northern division, which possesses a hot but more moderate PHYSICAL climate, consists of Panigur, and the valleys of the Rakhshan and Gwargo generally. Raghai and the little basin of Parom. The elevation varies from about 3,000 feet on the west to 4.500 feet on the north-east. A characteristic of the plains of the southern or coast division is the succession of low hills which crop up from the centre of the level surface of clay and sand. The Kéch valley is distinguished by its extreme narrowness and its fertility; the valley of the Rakhshán is wider but less productive.

The coast line, from Kalmat to the mouth of the Dasht The Coast. river in Gwetter bay, covers about 200 miles or 150 in a straight line. The jurisdiction of the Khán of Kalát, however, only extends from Kalmat to the proximity of the Barambáb river or the Kulánch seaboard, and from near Rás Píshukán to the mouth of the Dasht river, the coast line The east and west bays of Gwadar are in the of Dasht. possession of Maskat. The boundary near Pishukán is disputed, Maskat claiming to Wad-Rop about 11 miles east of Ganz and the people of Jiwnri to Darabbelau Karag. about 2 miles west of Rás Píshukán.

The coast extends in an east and west direction, its general lie being somewhat convex. Owing to the small rainfall, the salt nature of the soil and the physical conformation of the country, it is almost entirely desert. It presents a succession of arid clay plains impregnated with saliferous matter and intersected with water-courses. From these plains rise precipitous table-hills, with most fantastic peaks and pinnacles, varying in height above sea level from about 2,000 feet to hillocks of 20 or 30 feet high. Further inland, ranges of mountains of varying height extend parallel to the coast and to each other, bare, rugged and scorched.

The coast line is deeply indented with bays, but its most characteristic feature is the repeated occurrence of promontories and peninsulas of white clay cliffs capped with coarse limestone or shelly breccia which all approach the table-topped form. The intermediate coast is low, with white high sandhills or low sandhills with bushes and tufts of grass or in some places a strip of very low sand with extensive salt water and mangrove swamps behind it.

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There is little vegetation to be seen except here and there, a clump of date trees indicating a village. Near the sea, the rivers, which are frequently dry or nearly so, except after rain, become salt water creeks which are only navigable by small boats.

The soundings are generally regular, the bank generally running out to about 15 miles where it ends abruptly sometimes quite precipitously. A ship drawing 3 or 4 fathoms can seldom approach nearer to the land than 2 miles. Webb Bank near Astalu island is the only place dangerous to navigation along the coast of Baluchistan.

A detailed account of the littoral and the conditions prevailing will be found in the *Persian Gulf Pilot* published by the Admiralty.

The rise and fall of the tide varies in different parts from 6 to 10 feet and may generally be considered about 8 feet at springs.

The bays containing the best ports are Pasni and Gwadar. Gwetter is another large bay, part of which lies within Makran. The Kalmat creek would make the finest harbour on the coast, were it not for the shoals at the entrance; a place of minor importance is Rás Shamál Bandar. The capabilities of these places for landing are referred to under 'Harbours.'

Mountains.

The three main mountain masses in Makran are connected on the east with the chain which occupies the centre of Baluchistán and eventually joins the Saféd Koh on the north-east. Unlike the mountains lying immediately to the east of them, however, the general direction of which is north and south, the Makran ranges extend east and west. The mean elevation of the southernmost or Coast Range is somewhat lower than that of the Central Range which, in its turn, gives place in general elevation to the Siahan Range on the extreme north. All these ranges exhibit similar characteristics in their greater height at their eastern end, and their gradual decrease in elevation as they trend westward. The great masses of rock and conglomerate which form so conspicuous a feature of the ranges in the Jhalawan country are absent in Makran and are replaced by softer formations of white or grey clay, known as shur, and distinguished by the absence of stones. The Makran ranges consist of successions of Physical ridges scoured and cut by torrent beds, known as shep, which are always dry except after heavy floods.

Except the Bahrigarr or Coast Range none of the mountains as a whole have definite local names, but each hill and shoulder possesses a separate denomination. Hence it has been found necessary for this gazetteer to give the main masses such names as appear most suitable for descriptive purposes.

> Makrán Coast Range.

The Coast Range or Bahrigarr, as it is called by the natives, skirts the Arabian Sea for about 280 miles between 25° 22' and 26° 0' N. and 61° 44' and 66° 3' E. Its width varies from 35 to 70 miles, and the parallel ranges of which it is formed descend gradually from east to west. At its eastern end it touches the Hala hills, which bound the western side of the Las Béla plain, and it then continues westward in one confused mass, of which little is known to about the 64th, east parallel where it commences to bifurcate. the main mass continuing south-west and developing into the Tálár-é-band ridge, which ends abruptly at Sunt Sar above the Dasht river, and the other part continuing due west from Tal-é-sar, south of Oshap in a well-defined ridge, which forms the southern boundary of the Kech valley, and which may be called the Gokprosh hills. Crossing the Dasht river the Gokprosh hills continue westward into Persian Makrán.

At Pasni the main mass runs down southward to the sea after which it again retreats to enclose the Kulánch valley, on the western side of which it once more sends down an offshoot southward in the shape of the Koh-é-Dramb. Throughout its length, the ridges of which it is composed increase gradually in height to the northward, the watershed being formed by the northernmost. slopes approach the sea, the height of the hills decreases and in many places they are little more than a mass of confused hillocks.

At the north-eastern end of the range is the striking tableland of Dhrun, the highest peak of which is Shak, 5,177 feet above sea level. Gamoi Buri (3,871) is another peak. The table-land runs east and west, and the mountain on which it lies is about 30 miles long and 9 wide at its broadest PHYSICAL ASPECTS

part. It is accessible by three routes, the Mazanráh from the north-east, the Chiliki from the east, and the Shak from the west. The easiest is the Mazanráh, which is practicable but difficult for lightly laden donkeys and bullocks. The other two are practicable only by footmen. At the top is a large basin, with sides much higher than the centre, containing an irregular alluvial flat with the remains of an old stronghold. This is partly irrigated by the Dhrún-i-kaur, and is cultivated by a few families of Omrári Bizanjaus. The Gwahramzai Mirwaris claim bijjar and other payments from the inhabitants. Sind ibex and mountain sheep are found on the mountain, and the date palms in the ravines attract the bears. In ancient days, Dhrún was a refuge for outlaws and the resort of all border miscreants requiring any asylum, a reputation which it still retains to some extent.

To the south of Dhrún lies Rodéni Kach (4,193) and southward again, in Las Béla territory, are the long ridges of Gorán-gatti (4,181) and Táloi (3,022). Westward lies a confused mass of ridges. As the Tálár-é-band emerges northward of Kulánch, it is distinguished by the Rízdán peak (2,383), Haptári (2,232), Zahro (1,428), Karagi (1,759), Chappi-burzag (2,495), Dalígai-burzag (2,968) and Darwárai-burzag (3,125), the highest peak of this part of the range until it ends abruptly in the Sunt-Sar head (587). A separate paragraph describes the Gokprosh range.

Blanford describes the range as consisting of a pale grey clay or marl, more or less indurated, occasionally intersected by veins of gypsum, usually sandy and often highly calcareous, occurring in beds of great thickness. With this clay, bands of shelly limestone, calcareous grit and sandstone are interstratified, but these usually form but a small portion of the mass, although their greater hardness makes them conspicuous at the surface. Inland, the clays are less developed and thinly bedded sandstones are the prevailing beds. The rivers rising in the range include the Párkan tributary of the Hingol river which drains the eastern end of the range, the Basol which enters the sea between Ormára and Kalmat, the Rumbar, the Shádi Kaur, which drains the Pídárk valley, lying between the eastern ends of the Tálár-é-band and the Gokprosh hills,

the Sawar, the Ankarau and the Dasht which carries off the Physical drainage at the western end. As a rule, the river channels ASPECTS. form the best arteries of communication.

Only one bridle-path, recently improved, crosses the belt. viz., that from Pasni to Turbat: the rest of the tracks which traverse it are difficult, especially those at the eastern end. They include a track from Hinglaj to Jau via the Arra; a track from Ormára to Chambur in Kolwa, and another from Kalmat to Balor in the same valley; a track from Kulánch northward traverses the Hur pass, while that from Gwádar to Turbat and Tump crosses the Tálár-é-band by the Tálár and Asmángul passes.

Owing to the absence of water there is no permanent population residing in the range and the vegetation is scant, though good pasture grounds exist here and there, especially in the valley of the Rumbar. On the east the Sangurs pasture their flocks and bring down dwarf palm in some quantities to the coast. The Mehdizais and other nomads of Gwadar-i-Nigwar are to be found in the Dramb hills, where also is a small amount of cultivation. The most common tree is the acacia, chigird, and a kind of cactus is also fairly widespread; the grasses include kándár, gorkáh (Ischæmum angustifolium), nadag, kásh (Saccharum spontaneum) and barshonk. Sind ibex and mountain sheep are fairly plentiful on the range.

Gokprosh, from the scene of the engagement with the Gokprosh Baloch rebels in 1898, appears to be the most suitable name to apply to the nameless offshoot of the Coast Range which starts from Tal-é-sar, due south of Osháp in the Kéch valley, and runs due westward to Báho Kalát in Persian Makrán, separating Pídárk from Shahrak and Sámi, and Nigwar from Tump and Mand.

It consists of a single ridge at the eastern end which, however, gradually widens into the usual collection of parallel ridges as it approaches the western boundary of the country. Here the little valley of Kastag is to be found enclosed within it. Midway in its length, the Nihing and Kéch rivers join at Kaur-é-awaran and, forming the Dasht river, break southward through a fine gorge known as Gatt.

The summit of the range varies considerably in its general character, the peaks being sometimes pointed and hills.

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sometimes having flat tops, which broaden out occasionally into plateaux of considerable extent. The principal ones are at the eastern end and include Janzát (4,345), Mukh (3,984) and Khudáband (1,315). It is uninhabited except at Kastag, which was held by Sardár Mír Ahmad of Báho in 1903, and was peopled by Kosags and Lagors. The vegetation is similar to that of the main range. The rocks at the western end of the range are nummulitic, but their age is undecided. A little north of Kastag they consist of very fine grey shales and sandstones with vertical beds and a regular east and west strike.

There are few difficulties in travelling across the Gokproshhills. Tal-é-sar is crossed by the track from Pasni to Panjgúr via Pidárk; and the bridle-path from Pasni to Turbat crosses the range to the south of Turbat; the main track from Gwádar to Turbat passes over the range between Kánīn and Gushtang, and that from Gwádar to Tump runs via. Pittok, crossing the range to the north of Mach Chát. Several tracks also lead from Nigwar and Dasht to Mand, the principal one being that which goes over the Talidár-ékandag to Mand, and is known as Sargwáp-é-ráh on account of its frequent zigzags.

Central Makrán Range.

The Central Makrán Range occupies, as its name implies, the whole of the centre of the country, between the valleysof Rághai, Gichk and Dasht-é-Sháhbánz on the north and the Kolwa and Kéch valleys on the south. Subordinate to it and connected with it by low water partings on the west, is the long narrow line of hills, which form a continuation of the Bampusht hills, and which, in the absence of any local name, may be called the Zangi Lak or Dranjuk hills. This ridge separates Rághai and Gichk from the Rakhshán valley, and is sometimes locally called the Bampusht Range. It springs with the main mass of the Central Makran Range from Dhuleri, a point to the south-east of Shireza Kalát, and both, after curving southwest, gradually take a westerly direction. At the northeastern end the main mass consists of a single ridge known as the Koh-é-Patandar, but opposite Gwarjak in Mashkai, this ridge bifurcates the upper, and higher, offshoot skirting the southern edge of the valley of the Gwargo and running westward past the Gorán-é-Kandag into Zámurán, and the

lower forming a larger arc and running along the northern Physical. edge of the Kolwa and Kéch valleys to Mand. Opposite ASPECTS. Sámi this ridge is called Sámi Koh, and between Kéch and Buléda is known to the people of Kéch as the Bulédai Band. and to those of Buléda as the Kéch Band. The latter name is the more common. In the east and centre of the belt a mass of minor ranges lie between the more prominent ridges just mentioned; westward the range includes the area of closed drainage known as Balgattar and the valley of Buléda. Between the Garr hills and the main mass are situated the valleys of Rághai, Gichk, of the Gwargo river and of Parom. The whole range is about 250 miles in length and about 45 miles wide.

The Koh-é-Patandar at the eastern extremity and the central part of the range contains little that calls for remark-There are no permanent inhabitants but a few Muhammad Hasni, Rakhshani and Saidi nomads visit the hills for pasturage. The trees are confined to some scattered specimens of olive and pistachio and occasional patches of dwarf palm, and in the torrent beds are to be seen some of the coarser grasses usual in this part of the country. The two highest peaks are situated on the west of Mashkai, Zung (7,490) and Ráhat (7,100). From this point the elevation of the northern ridge of the main mass decreases to about 5,000 feet, and this decrease continues to about 4,500 in the neighbourhood of the western border. The southern ridge is lower, the elevation being only about 2,700 feet at the western end of the Kéch Band. A separate description is given of the

The most interesting part of the range and the only one which is inhabited is Zámurán, so called from a creeping plant sámar, which grows in abundance there. It consists of the hilly tract lying between Názénagán, to the east of Ushtar-kand and Hung in Persian territory. On the north it is bounded by the valley of the Nihing and on the south by the valley of the Kulbar river and Buléda. Zírruki (4,242), Machi (4,453), Hishar (4,578) and Buzáp (4,270) feet, are the highest peaks of this portion of the range. Numerous small well watered villages are to be found, picturesquely situated near the springs known as kallag, which abound in this part, and of which, according to local

Zangi Lak hills.

Zámurán.

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accounts, there are 360. The most important village is Siáh Gisi, while others are Gwánzagán, Momich, Sorag, Darapkán Bádúi, Kumbi-Kallag, Siáh Kumb and Tézgarán. Olive, bitter almond, willow and wild figs are common, and asafetida grows in considerable quantities in rainy years. Many other herbs, which are much prized by the people for their medicinal qualities, are also found. Wheat, barley, rice, surrat, onions and a little tobacco are cultivated in terraced fields, and pomegranates, apples, plums, grapes, figs, oranges and limes are produced in small quantities.

The inhabitants who are known as Zámuránis are: wonderful hillmen carrying a forty pound load from Siáh. Gisi to Turbat, a distance of 40 miles, as the crow flies, in a day. They are of peaceful habits and, though ready to combine against a common foe, rarely fight among themselves. They are very skilful at taking the water of the kallags to cultivable ground and, when necessary, split slab rocks which they happen to meet with by burning dwarf palm on them and then dashing cold water on the red hot rock. principal sections are the Shambézai, Shúráni, Muhammadzai, Sangur and Askáni. The headman belongs to the Shambézai section. Zámurán has always had a somewhat evil reputation with the authorities of Makrán as a place of refuge for the free lances and discontented of the country, but it is now (1904) under much better control. "Zámurân kámran" or "Zámurán the free" was the watchword of the country in former times.

The western end of the Central Makrán Range, which is the only part which has been geologically examined by Blanford, consists of shales and thin bands of sandstone, apparently identical with those of the Coast Range, but much contorted and hardened, the shale becoming slaty and almost schistose with numerous veins of carbonate of lime in places. Some of the sandstones are massive while a few beds are conglomeritic, the matrix being argillaceous, the pebbles principally sandstone. Some hard grits are also found, and the sandstones occasionally have a ferruginous coating giving them a peculiarly dark appearance.

All the branches of the principal river of the Makrán system, the Dasht, have their sources in the Central Makrán

Range. The Nihing, as already mentioned, carries off the Physical drainage of the northern slopes of the Zámurán hills, while the Gish Kaur takes off that of the Buléda valley and the surrounding country, and the Kil Kaur that of the country further to the east. Among streams at the north-eastern end may be mentioned the Doráski, the Gichk and the Rághai. Reference has already been made to the Gwárgo. the basin of which lies between the main mass and the Zangi Lak hills.

All the main lines of communication between the Jebri, Mashkai, Kolwa and Kéch valleys on the south and Panigur and Rakhshan on the north cross the range. They consist of tracks which are more or less suitable for camel carriage, but none are "made" with the exception of the bridle-path between Turbat and Panigur via Buléda. Beginning from the north-east the passes over the main mass are the Dhúléri between Jebri and Shíréza: the Purki between Korásk and Rághai, on the route from Nál: the Tank through which the Kachhi-Panigur route passes: the Doráski traversed by the Béla-Panigur route; the Mádag pass on the road between Mádag-é-Kalát and Panigúr which joins the road from Turbat to Panigur to the south of the Gorán-é-Kandag; the Kátig pass over the Sámi Koh on the last named route; the Garruk pass between Kalátuk and Buléda: the Hapt-Kandag between Buléda and Panigur; the Ushtar-kand between Buléda and Parom; the Zarágo on the track to Géshtagán; and finally the Kalgar on the road to the Nihing through Zámurán. As in the other ranges of Makrán the only game which is fairly plentiful consists of Sind ibex and mountain sheep (guránd); a few bear are said to be procurable at the western extremity and also an occasional

The subsidiary range which has been denominated the Zangi Lak or Dranjuk hills is a sharp ridge about 7 or 8 miles wide which possesses no special interest. It gradually decreases in elevation as it runs westward, the highest peak being Dranjuk 6,616 feet, after which comes Zarágo (5,554). Crossing the westward boundary of Makrán, it amalgamates with the Bampusht Range which consists of shales and sandstones, a formation which appears to be common in the eastern part also.

panther.

Zangi Lak or Dranjuk. PHYSICAL ASPECTS. Numerous passes cross the range, the principal being the Nidoki, between Shingri and Nok Cháh; the Halol and Murgháp between Sáka Kalát and Rakhshán; the Garr on the Béla-Panjgúr and Kachhi-Panjgúr routes; the Kasháni Kandag on the road from Sháhbánz Kalát to Isai; and the Darag-é-dap traversed by the Gwárgo river.

The Siáhán Range.

Siáhán, from the term applied to the western extremity of the range, is the name which may be given to the long ridge which separates Khárán from the valley of the Rakhshan river and eventually disappears westward in the hills of Persian Makrán. The range has never been thoroughly explored. It consists of two ridges: that on the south runs west-south-west from a point near Shiréza: on the north, a parallel one starts from the desert east of Wáshuk in Khárán and trends westward towards Dizzak in Persia, where it is known as the Siáhán or Siánáh Koh. is from this range that the name for the whole mass has been taken. It forms the main ridge at the western extremity of the mass, but on the east its place as the main ridge is taken by the range on the south.

The eastern end of the latter is variously known merely as Band, or as the Khárán-Rahkshán Lath, while on the west and north of Panigur it is known as the Koh-é-Sabz. The Koh-é-Sabz is only well defined to the west of the Korkian pass, from which place it gradually rises to a height of nearly 5,400 feet before it is crossed by the defile known as the Tank-é-Grawag. On the other hand, the Khárán-Rakhshán Lath descends gradually towards Jang-já é-Gájiún in Panjgúr, and forms the hilly country between the latter place and the Koh-é-Sabz. It follows, therefore, that a traveller to the Khárán plain on the north, from the part of the Rahkshan basin which lies to the east of the Korkián pass, must cross two main ridges, while immediately north of Panigur he must traverse three, viz. the hilly country consisting of the extremity of the eastern main range and lying between Panigur and the Koh-é Sabz; the Koh-é-Sabz and the Siáhán or Siánáh Koh proper.

The highest point of the range is on the east and is Razak (6,758 feet); other peaks are Mughal Pabb (5,979 feet), and Choto-é-jik (5,874 feet); westward, the range

decreases in height to about 5,000 feet. The total length PHYSICAL from Shireza to the western frontier is about 176 miles.

The northern ridge between Washuk and the valley of the Palanták torrent is known as the Chér Démi Lath: to the south it encloses the valley of Chér Dém in the Wáshuk niábat of Khárán. Its height is about 5,000 feet. At its western end a well-known peak is Hétái, which lies to the west of the Tank-é-Zurrati, through which the Máshkél river breaks northward to the hámún of the same name.

Geologically the Siáhán range has never been fully examined but its general aspect is abrupt, rugged and broken. The Koh-é-Sabz portion is composed of shale and volcanic rock, contorted in many places into fantastic shapes with synclinal and anticlinal curves. The shale, which lies throughout in perpendicular parallel layers or at a slight angle to its base, gives the hills a very sharp and jagged appearance, but though difficult they are not unscaleable, very steep and precipitous escarpments being rare and generally limited to the sides. The range being one consolidated upheaval, there are no valleys, ascents and descents from one ridge to another being made by following the rivulets.

The Rakhshán tributary of the Máshkél river carries off all the drainage from the southern slopes. On the north a number of hill torrents descend, either to lose themselves in the Khárán plain, or to join the Máshkél river. the more important are the Gujjar, the Réginták, the Grésha Kaur, the Palanták, the Pilin, the Bibi Lohri, and the Barshonki.

Of the two gorges already mentioned, the Tank-é-Grawag lies in the Koh-é-Sabz and the Tank-é-Zurrati in the northern ridge of the Siáhán Koh. The former is so termed from the reeds called grawag which grow here in great abundance. There is also a small patch of cultivation with a few date trees at the point where it makes its first turn, It is 6 miles in length and is easily passable when the river is low, but is subject to great and violent floods. The latter is just over 8 miles long and of medium width, being nowhere less than 80 yards and generally nearly 150, The perpendicular cliffs which enclose it are about 200

PHYSICAL ASPECTS. feet in height. Quicksands exist at some of the fords. There is perennial water in both defiles.

The range possesses no permanent inhabitants; among the nomads who pasture their flocks on it are the Muhammad Hasnis, Nasrois, Bullozais, Sopaks and Hájízais of the Rakhshán valley and a few people from Kúhak called Siáháni. Some nomads from the Khárán plain also visit it, chiefly Rékis and Kúchai Siáhpád and Taghápi Rakhshánis.

The range is crossed by numerous footpaths and by a good many tracks which are used by men with bullocks, donkeys, etc. Among the latter are the Siminj, Sabzáp, Kásag, Miáni, Soráni and Séchi. Commencing from the east the passes chiefly used by caravans are the Zard, to the northwest of Shíréza; the Páliáz, north of Nág-é-Kalát; and the Sagár-é-Kandag and Korkián passes on the road from Isai to Wáshuk. The Hétái is an important pass north of Tank-é-Grawag, on the road from Panjgúr to Dehgwar in Khárán.

No forests exist on the range; many of the torrent beds contain tamarisk, and some asafetida is collected on it by Afgháns in good years. The date palm flourishes in places.

Rivers.

For hydrographical purposes Makrán may be divided into a southern, northern and eastern division. The former, which lies to the south of the watershed of the Central Makrán Range, is drained by the largest river in the country, the Dasht, and by several minor streams such as the Shádi Kaur and Basol; the northern, drained by the Rakhshán, includes the valley of the same name and that of the Gwargo; the eastern division consists of the Gichk and Rághai valleys and the upper extremity of Kolwa, the surface water of which joins the Mashkai tributary of the Hingol river. The streams in the latter include the Gichk and Rághai, which unite near Sáka Kalát and join the Mashkai through the gorge called Tank at a point south of Gwarjak; the Doráski which joins the Mashkai near Dát; and the Wahli which drains upper Kolwa from a point to the east of a line drawn from Upper Málár to Gushanag Of these streams, those that merit description are the Dasht and its tributaries the Shadi Kaur, the Basol, the Rakhshan, the Gichk, the Raghai, and the Tank.

The Dasht river is formed by the junction of the Nihing and the Kéch Kaur at Kaur-é-awárán, the point in the Kéch valley between Kalátuk and Násirábád where the river breaks southward through the Gokprosh hills. The Kéch Kaur in its turn is formed by two streams, the Gish Kaur and the Kil or Kúl Kaur.*

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> The Gish Kaur.

The Gish Kaur has its head waters in the western and north-western end of the Buléda valley, and drains the latter and the west central part of the Central Makrán Range. Its principal affluents are the Gazbastán, the Píri Kaur and the Shétáp. The flow of the water is not perennial throughout, but it expands, at short intervals, into large shallow pools from which the permanent villages of Buléda are irrigated. From these pools the Maináz, the Sulo, the Chib, the Jawan Mardan, the Juhli and the Mirábad kaurjos have been taken off, the Jawan Mardan kaurjo being the largest. Occasionally thick jungles of tamarisk, reeds and kahúr occur in which pigs abound. The banks are low in this part of its course and the bed pebbly. From Buléda the stream trends southward in a rocky tortuous course as it breaks between the Kéch or Bulédai Band and the Sámi Koh. Here and there are patches of jungle and pools of water. On debouching from the hills, it joins the Kil Kaur to the north of Kailag in the Kéch valley.

The sources of the Kil or Kul Kaur consist of numerous hill torrents which rise in the east central part of the Central Makrán Range between Gorán-é-Kandag and upper Málár in Kolwa, the principal being the Godirri, Zahm and Dor. Passing to the east of Dashtuk and Bálgattar, the stream, which is not perennial but contains occasional pools and is studded with tamarisk jungle, pursues a tortuous course in a south-easterly direction to Tank-é-Pusht, the boundary between the Kéch and Kolwa valleys. Up to this point, the course is confined between mountains, but onward it ploughs its way deeply into the soft soil of the Kéch valley. Its southern or left bank is steep, precipitous and rocky, and is uncultivated except at Irok and Zayak, two insignificant places. On the other bank many kaurjos have been excavated, the principal being the Tijábán and Karki conduits and two at Oshap. The last named is a most picturesque Kíl Kaur.

^{*} Kaur means a stream in Baluchi.

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place where the river expands into large pools, and there is a thick jungle of tamarisk and kahúr, with long waving grass in which wild pigs abound. The Kíl and Gish Kaurs unite to the north of Kallag near Sámi. Local accounts state that a large dam or a gabrband once existed across this river at a point called Tatagár near Tank-é-Pusht by means of which the valley of Bálgattar was irrigated from the Kíl Kaur. The dam was afterwards washed away and the prosperity both of Bálgattar and Osháp destroyed.

The Kéch Kaur.

The course of the Kéch Kaur lies in the centre of the Kéch valley. Besides carrying the waters of the Gish and Kíl Kaurs, it receives the drainage of the slopes of the Kéch Band on the north and of the Gokprosh hills on the south. Near Sámi it is narrow and deep, the banks being about 35 feet, but, as it advances westward, the channel becomes shallower until the banks are not more than 6 feet high in the vicinity of Turbat, while the width has increased to about a mile and a half. The character of the banks is not uniform; they are sometimes broken, indented and difficult, and sometimes consist of a shelving mud bank. As in the case of the confluents from which the Kéch Kaur is formed. the water is not perennial, but appears here and there in the bed in large pools from which kaurjos have been constructed. Fairly large areas have been thus irrigated at Sámi and Kéch proper. The largest are the Sámi Kaurjo, the Nokkash, the Kirmán Dizz, and the Ginna. The river is subject to high floods, which, however, quickly subside, but they have caused much diluvium at Sámi and in Kéch proper, and a good many acres of irrigated land have been carried away at both these places. Kahur-é-Kalát has been nearly washed away; Kaush Kalát is threatened (1905). About thirty-five years ago, the populous town of Miri, then the capital of Kéch, was destroyed, but the floods have now been diverted to the opposite or southern bank. The Kéch Kaur has little growth in it except a few stubby tamarisk bushes.

The Nihing.

The Nihing rises at Sar Parom, the watershed between Parom and Géshtagán, and winds its tortuous way between the Zámurán and Bampusht ranges forming the boundary between Kalát and Persian Makrán. As it proceeds, it describes the arc of a circle and debouches from the mountains to the north of Aspi Kahn, whence, skirting the Bulédai

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Band, it turns south-east and forms a delta to the west of Tump spreading out into large shallow pools from which the water is carried in irrigation channels for purposes of cultivation. The principal kaurios are the Malant, Kisano. Khushkába and Bálicháh. Before reaching Aspi Kahn the Nihing is joined by the Kulbar and Tagrán, both of which are famous for their abundant pasturage. affluent, the Mandi Kaur, is dammed at three different points and irrigates a considerable area in Mand. the source, the surrounding hills contain pistachio trees and lower down tamarisk and kahúr are to be seen. scenery in the upper part, where the channel is narrow between precipitous banks, is desolate in the extreme. In Tump the banks are low, about 4 feet, and the width is about half a mile. Like the Kéch Kaur, the Nihing also sometimes causes diluvium, and in 1903 carried away a few fields and many date trees in Tump. The water of the river is good and fresh. It is only after rain that a continuous stream is to be seen above ground.

The Dasht.

The Dasht river proper breaks through the Gokprosh range below Kaur-é-awaran and falls into the sea by a large creek which is tidal for 12 or 15 miles. Like its confluents, the Dasht is not a continuous stream and only fills after rain. At other times water is only to be found in pools. After heavy rain, the rush of water from the hills on either side causes it to rise rapidly and inundate the land on its banks for a considerable distance, the land thus flooded being at once cultivated. Tamarisk and kahúr trees are to be found wherever there are standing pools of water. the plain the banks are high and steep and composed of mud, but at intervals they are ploughed down into gradual slopes towards the bed to admit of cultivation. Such tracts are known as er-apag and are noted for their fertility. The average depth of the banks is about 25 feet and the width about 200 yards.

The Shádi Kaur rises at a water parting south-east of Shádi Kaur. Jámgwang, whence also the Daddai and Nílag flow westward. The Shádi Kaur first runs south and then turns eastward and, after a short distance, is joined by the Pidárk stream. A larger tributary is the Bahri Kaur, which rises on the southern slopes of the Gokprosh range in the

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valley which contains Jamak and Gwarkop, and joins the Shádi Kaur near Gulámáni Bént, a halting place on the road from Pasni to Turbat. From the point of confluence, the united streams run southwards and, breaking through the Talár-é-band hills, fall into the sea 2 miles north-eastward of Pasni. In the lower part of its course the Shadi Kaur is joined from the east by the Asi, Pácharo and Dosi. Numerous other hill torrents join both the stream and its tributaries. The main stream ends in a large shallow creek with swampy banks which boats can only enter at high The channel and banks of the river bear abundance of tamarisk, kahúr and sometimes dwarf palm. The flow of water is not perennial, but it collects in frequent pools. The flood water is only utilized for cultivation on a few fields at Gulámáni Bént and Taloi Sunt. The floods provide the inhabitants of Pasni with fuel, as each brings down plenty of tamarisk and kahúr trees. The total length of the course is about 50 miles.

The Basol.

The Basol rises in the hills to the south of Balor in Kolwa. Near its source it is known as the Karpad Kaur and a little lower down as the Chétrau. The Londi and Goráni from the west and the Sulér from the east are its principal confluents. The whole length of its course, which is about 80 miles, lies between the high clay ridges of the Makrán Coast Range until it finds its way into the sea near Rás Basol. about 20 miles west of Ormára. Among the mountains its course is tortuous and narrow, and at Abgir, the junction of the Karpad and Pardhán, the width is only about 10 or 12 yards. The water appears in pools at many places, the largest being at Siáh-Dát, Abgír, Waqáb and Koári, all of which are said to be perennial. It is nowhere utilized for cultivation. There is little or no vegetation, and pasturage even is scarce. Nearly the whole length of the track from Kalmat and Ormára to Balor in Kolwa runs through the bed of the stream and is very bad for beasts of burden. river falls into the sea through a creek in Las Béla territory, the land in the vicinity being low and swampy.

The Rakhshán. The Rakhshán rises at the Nidoki pass, south-west of Shíreza, under the name of the Nág, and, running south-westward, unites with the Lop stream at a point to the west of Nág-ai-Kalát. It then flows west-south-west through the

centre of the long valley comprising the districts of Rakhshan and Panigur and parallel with the Siahan range on the north and the Zangi Lak hills on the south. In Rakhshan it possesses little or no water, except a large pool at Nag-ai-Kalat from which five small conduits are carried for purposes of irrigation; in Panigur, however, it expands into a series of bright clear pools connected with each other by small water channels running over a pebbly bed. The banks are here bordered with numerous date groves and most of the water is used for irrigation. To the west of Kallag, the last village in Panigur, is Dabbag, where there are more pools and much long grass, tamarisk and kahúr trees in which wild pigs are to be found. The only considerable affluent joining the river west of Panigur is the Mazan Dashtuk from the west, the Askani from the east, and the Gwargo from the south. After traversing Panigur, the main stream turns northward and joins the Máshkél river from Kúhak just south of the point where it bursts through the Koh-é-Sabz range by the Tank-é-Grawag or Grawag

The Máshkél, which is described in the Gazetteer of Khárán, crosses the Siáhán range at Tank-é-zurrati and runs along the western side of Khárán to the Hámún-i-Máshkél, the total length from the source of the Rakshhán being 258 miles.

defile.

Though a considerable water course, the banks of the Rakhshán are low, shelving and irregular, consisting of the hard clay known as kork. In Panjgur the average depth is about 6 feet and the width about 1½ miles. It carries high floods, but owing to its breadth they never do much harm. The bed contains little tamarisk or grass to relieve the monotony of the barren region which it traverses. Though the river is easy to cross, dangerous quicksands exist in some places.

In the time of the Maliks the river is said to have been dammed by the large band close to Bunistán, the western part of Isai, the remains of which are still known as Band-égillar.

The Gwargo, the only important affluent of the Rakhshan, rises at Kork, or Gichki Sargwaz, the water-parting between the valleys of Gichk and Shahbanz. The principal affluents

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The Gwárgo. PHYSICAL ASPECTS. are the Guzdairza, Gwani and Során. It runs west through the soft soil with a wide sandy bed, the mud banks being on an average about 7 feet high. The channel is nearly always dry and floods are rapidly carried off. A great deal of tamarisk, dwarf palm, kunar (Zisyphus jujuba) and kahúr grow along these banks, affording excellent pasture for flocks. Very little cultivation is now carried on, but it is evident that the alluvial soil was once very productive. In Shahbánz there are traces of old dams which were apparently used for irrigation.

Passing to the north of Shahbanz Kalat and to the south of Kobun Kalat, and then turning north-west, the stream crosses the Zangi Lak ridge, here known as the Bampusht hills, at Darag-ai-Dap and joins the Rakhshan at Binga Kalat to the west of Panjgur.

The Gichk.

The Gichk and Rághai streams drain that part of Makrán which slopes south-eastward. Both of them enter the Tank and join the Mashkai tributary of the Hingol. rises at Gichki Sargwaz, opposite to'the head-waters of the Gwargo, and runs eastward through the Gichk valley passing to the south of Sáka Kalát or Kahn. Eventually it makes a bend south-east and joins the Rághai Kaur among the lower spurs of the Central Makrán Range. From its source to Sar-áp, a halting place about 13 miles west of Sáka Kalát, there is no water. From Sar-áp the water increases in volume until there is a running stream at its confluence with the Rághai. The bed and banks of the stream are covered with tamarisk and other trees, there being an abundance of kahúr west of Sáka Kalát. There is also plenty of grass in the bed. The stream receives no affluents worth mention. The banks are low, irregular and shelving. The total length is about 50 miles.

The Rághại. The Rághai rises at the watershed south of the small basin of Kappar and trends south-westward through the valley of the same name until, turning south, it joins the Gichk river at a place called Tank where the Khárán Chief has a thána. This is Tank west; Tank east lies at the opposite end of the Tank stream near the southern extremity of the Mashkai valley. No affluents of importance join the Rághai.

The water is nowhere perennial, but it appears throughout in large pools at frequent intervals. At Pizg, a kaurjo has

been constructed. The whole of the course of the Rághai Kaur is thickly covered with tamarisk, dwarf palm and grass, and the bed affords shelter to caravans from the bitter blasts of the *gorich* wind during winter. The route from Kalát to Panjgúr follows the right bank throughout. The total length is about 60 miles.

The Tank River.

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The Tank river below the junction of the Gichk and Rághai streams winds a tortuous course through the Patandar portion of the Central Makrán Range in a southeasterly direction. Here and there tamarisk and dwarf palm with plenty of grass are to be seen, and there are pools at intervals. The largest is the Katli Gwarm which the Panjgur Nakibs visit for purposes of fishing. A fee, usually at 4 annas per donkey load, is levied by the Khárán and Muhammad Hasni chiefs for the right of fishing, but the rate is frequently altered. The bed is about 50 yards wide and would be dangerous in case of a heavy The Tank joins the Mashkai river about 13 miles to the south of Gwarjak. A little cultivation is done at Pasht Koh, and a kaurio is used for irrigation at Tank east.

Scenery.

Opinions on the scenery of Makrán have generally been unfavourable. "To give an idea of the physical nature of Makrán" wrote Sir Charles Macgregor, "take one of those big brown stones one sees all over Baluchistán, which, looking as if they had just come out of a fire, very aptly represent Makrán, and just put a few specks of green on it and the picture is complete."

Sir Thomas Holdich in *The Indian Borderland* gives a more detailed picture and writes:—"The mountain scenery of this part of Makrán is not exhilarating.* A dead monotony of laminated clay backbones, serrated like that of a whale's vertebræ, sticking out from the smoother outlines of mud ridges which slope down on either hand to where a little edging of sticky salt betokens that there is a drainage line when there is water to trickle along it; and a little faded decoration of neutral-tinted tamarisk shadowing the yellow stalks of last year's forgotten grass along its banks, such was the sylvan aspect of a scene which we had before us only too often.

[•] From the coast northward to Kuhak, -Ed.

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"But there were also bright spots where the oleander grew, and pools of water that looked none the worse for being salt; and here and there a few date palms, where a certain regularity about the setting of the boulders suggested the pre-historic existence of a small hamlet and a few This sort of scenery carried us far acres of cultivation. inland; but as we progressed northward the rule of the road as regards landscape was broken by the broader cultivated valleys, which intersect Makrán from east to west. been following up the length of these valleys instead of crossing them at right angles, our way would have been plain, and much of our path beautiful. For Makrán is a country of most surprising contrasts. In the direction in which we were travelling we only lit on such valleys as Kej (Kéch) and Bolida (Buléda) at long intervals. When we did so it was hard to recognise that we were in Makrán at all, so different was the aspect of the country. Instead of the serrated outlines of jagged and barren clay hills, and the white twists of a narrow little pathway woven amongst the rocks, we found ourselves surrounded by palm groves set in the midst of emerald-green crops of young wheat, with here and there a white-crowned citadel over-topping the palm plumes and looking as pretentiously feudal and aristocratic as if it had been built of Scotch granite instead of underdone mud bricks,"

The country contains no lakes, but a characteristic feature of the country consists of the kaps or areas of closed drainage which occur in Kolwa, Bálgattar and Parom. They are often of considerable extent, that at Parom having a diameter of about 12 miles. Ordinarily the centre is dry, but, after heavy rain, the drainage from the surrounding hills forms a shallow lake. The area liable to inundation is unmistakably delineated by a verdureless expanse of dazzling whiteness, produced by the salts left after the evaporation of the waters. Speaking of the Bálgattar kap, Macgregor remarked that though there was no sign of the saltness of the soil along the edge, where it had already dried up when he was there, the ground underneath must have been intensely salt, as, though the rain had fallen only two days before, the water had already become so impregnated with salt as to be quite brackish. Salt is obtained from the kaps,

and has been found on analysis to yield a high percentage of sodium chloride.

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The only island lying off the coast is that of Haptálár, Astálu or Astola, an account of which will be found in the Miniature Gazetteer of Kulánch.

As already mentioned, the principal ports are Pasni and

Islands.

Gwádar and the steamers of the British India Company now (1905) touch at both these places. Kalmat, Rás Shamál Bandar, and Jíwnri and the mouth of the Dasht river in Gwetter Bay are of minor importance. The great drawback to them all is the shoals, which necessitate ships anchoring from 1½ to 3 miles from the shore and the roughness of the surf which makes landing very difficult except in fine weather. No facilities for landing exist anywhere. Merchandise and animals have to be transferred to open boats in order to be put on shore. Since the communications with

the interior have been improved, Pasni forms the most convenient port for travellers going to and coming from Makrán.

Harbours.

Pasni, which is 194 miles from Karáchi, lies in a great bay, the extreme south point of which is known as Jebel Zarrén. It presents an open roadstead, but is not so well protected as Gwadar Bay further up the coast. Eastward of Jebel Zarrén and nearer to the village of Pasni lies Rás Juddi which rises to a height of about 150 feet. A small shallow bay is enclosed between it and Jebel Zarrén. A sand-bank to the south of the mouth of the Shádi Kaur runs for some distance eastwards, and an extension of this bank is said to run southward towards Rás Juddi at no great distance from the main land which might possibly be used as the site of a breakwater. Large boats, carrying 1,000 bags, are said by the natives to be able to come within about 100 yards of the shore and discharge. The distance from high to low water is said to be 62 yards. During the three months of the monsoon small fishing boats can follow their ordinary occupations, but trade in large vessels is practically at a stand-still.

Pasni Bay.

The town of Gwadar (258 miles from Karachi) stands on a sandy isthmus to the northward of Gwadar head, a block of highland 7 miles in length, east and west by 1½ miles wide, and overlooks Gwadar east bay which is well sheltered from south-westerly winds and sea, but the monsoon winds

Gwadar Port. PHYSICAL. ASPECTS. cause vessels to roll heavily. Vessels drawing 3 fathoms have to lie 1\frac{3}{4} miles off shore. The west bay, from Gwadar head to Pishukan, is 9 miles wide and 7 miles deep.

Kalmat.

A description of Kalmat will be found in the Miniature Gazetteer of Kulanch. The drawbacks to its use as a harbour are the shoals at the entrance, the absence of a good water-supply, and the difficulty of communication with the interior.

Rás Shamál Bandar. Rás Shamál Bandar lies about 23 miles west of Jebel Zarrén, the furthest point of Pasni bay, and 220 miles from Karáchi. It is a small bay to the eastward of the Rás Shamál cape which is frequented by fishing boats and affords small vessels shelter in westerly winds. Like other bays it is shallow.

Gwetter bay and Jiwnri.

Jiwnri, 290 miles from Karáchi, lies about 2½ miles to the north of the cape at the east entrance of Gwetter bay, which is nearly 16 miles wide by 8 miles deep. The village lies in a cove which is much exposed, but differs from other villages on the coast owing to its situation on rocky cliffs some 20 feet high. The water-supply is meagre and obtained from wells in a hill torrent.

The Jiwnri cliffs extend 3 or 4 miles up the bay, after which the east side is sandy with rocky hills at a short distance from the beach. The whole north of the bay is very low with many creeks and mangrove swamps. The largest creek is that of the Dasht river, which is tidal for 12 to 15 miles. The river at its mouth is about 400 yards broad, with flat, sandy banks, almost flush with the water. For 4 miles further up, the depth at flood varies from 2 to 3½ fathoms in the deepest places, and the width gradually lessens to 100 yards. At 6 miles the width still further diminishes to 80 yards, and the depth to 6 feet, and this continues to the tenth mile. From this the depth goes on decreasing till, at the fifteenth mile from the mouth, 3 feet can hardly be got at high tide.

Geology.

The little that is known of the geology of Makrán is confined to the coast and the following account is given by Mr. W. T. Blanford of the Geological Survey of India, who accompanied the Persian Boundary Commission of 1871-2.*
"Throughout the Makrán or Baluchistán coast, from near

^{*} Eastern Persia, Vol. 11, page 462.

the frontier of Sind to the entrance of the Persian Gulf, the hills and headlands are composed of late tertiary formation, differing entirely in mineral character from the gypsiferous series of Loftus, of which, or part of which, it may, however, be a marine equivalent. The distance from the coast to which this group extends is quite unknown, except near Gwadar, where it is found for about 20 miles inland before the nummulitic formation crops out from beneath it.

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"For this formation I have proposed the name of the Makran group,* which may be retained until the position of the beds in the general series is determined. The prevailing rock along the coast is a pale grey clay or marl, more or less indurated, occasionally intersected by veins of gypsum usually sandy, and often highly calcareous, occurring in beds of great thickness. With this, clay bands of shelly limestone, calcareous grit and sandstone are interstratified, but these usually form but a small portion of the mass, although their greater hardness makes them conspicuous at the surface. Inland, near Gwadar, the clays are less developed, and thinly bedded sandstones are the prevailing beds.

"Nothing accurate has been determined hitherto as to the thickness of the Makrán group, and very little can be stated as to any definite distinctions to be drawn between the different beds of which it is composed. sections exposed on the sides of the hill-ranges in Baluchistán, it is probable that not less than an aggregate thickness of 2,000 or 3,000 feet can be assigned to the group; probably this is much below the truth. From what little was seen of the basal portion near Báhu Kalát, where the Makrán beds rest upon the nummulitics, it ems probable that the grey clays, with rather thick bands of calcareous sandstone, as at Gwádar, are the upper members of the group, that the sandstone beds become thin and much more numerous below, and at the same time less calcareous, while, still further down, sandstone predominates, and clay, if it occurs, is altogether subordinate. But it is not quite certain that the sandstones without clay are not nummulitic.

Records, Geological Survey of India, 1872, V, p. 43.

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"The rocks of the Makrán group are highly fossiliferous, but unfortunately the fossils have not hitherto been fully examined, and, therefore, all that can at present be said of their age is that they represent a portion of the later tertiary epoch. From a cursory examination of some shells collected by Captain Stiffe, Mr. Etheridge thought that miocene forms could be detected amongst them, but the same gentleman has very kindly examined a larger collection made at Gwádar by Dr. Day, to whom I am indebted for an opportunity of examining them, and he considers that the shells collected have a very late facies, and may even be pleistocene."

Botany.

Arrian,* in describing Alexander the Great's march through Gadrosia, quotes Aristoboulos' account of the myrrh trees which grew plentifully in the desert, and of the collection of the drops by the Phænicians who followed the army as sutlers. Holdich, in an articlet on Alexander's retreat from India, suggests that this was the exudation of the tamarisk. Spikenard is also mentioned by Aristoboulos as growing in abundance, and another tree which grew in places washed by the sea had leaves like that of the laurel and bore a flower with sweeter perfume than white violets. McCrindle quotes Chinnoch's opinion that this was the snow-flake. but it may be noted that the mangrove is also fairly plentiful on the coast. Another kind of thorny stalk was also noticed, which grew on dry land and was armed with a thorn so strong that if the dress of a rider got entangled in it, he was pulled off his horse. No doubt this was some kind of Acacia.

The vegetation of the country is similar to that which occurs generally throughout southern Baluchistán and consists of an ill-favoured, spiny scrub. Such species as Capparis aphylla, Salvadora oleoides, Zizyphus jujuba, Prosopis spicigera, Acanthodium spicatum, Tamarix articulata, several kinds of Acacia, and many Astragali are common. The Perso-Baloch Boundary Commission of 1896 found that there was always a plentiful supply of the grass called

[•] McCrindle's Ancient India, its Invasion by Alexander the Great, page 170.

[†] Published in the Journal of the United Service Institution, Vol. XXIII, No. 116.

barshonk even in places in which drought had occurred for several years, on which horses did well. A list of some of the principal plants found in Makrán giving the local and botanical names will be found in the Appendix.

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Besides barshonk, the commonest grasses in the valleys are gandil (Eleusine flagellifera), indar káh (Trianthenia pentandra), kásh (Saccharum), dil (Andropogon) and drug (Eragrostis cynosuroides). Kásh and díl also grow in the hills where gorkáh (Ischoemum angustifolium) is also common.

Zoology.

The characteristic wild animals are few in number and similar to those common to the south of Baluchistán. They include the Sind ibex, leopards, wolves, jackals, foxes and mountain sheep with occasional bears, hyænas and badgers. Wild pig are met with in the neighbourhood of Panjgur, and are numerous at Osháp in the Kéch valley, in Buléda, and at Awaran in Kolwa. Ravine deer are common throughout the country, especially near the coast. Hares are found in the plains and field rats do a good deal of damage in the cultivated areas. Of game birds, grey partridge and sisi are scarce and only found in the Zamuran range; a few black partridge haunt the jungles on the river banks and wild duck frequent the pools of the river beds in winter. Snakes are met with throughout the country; they are less numerous in the north, but increase in the centre and south. Of the deadly species, the most common is a small one locally called garr and a black one known as siáhmár.

Seasons.

Each of the natural divisions of the country possesses Climate and climatic peculiarities of its own. The coast has a moderate climate, intermediate between that of Karáchi and the Persian Gulf, and the seasons are less marked than in the interior; further inland is a zone of extreme dryness and great heat; the elevated valley of Panjgur has a slightly more temperate climate. That of the coast appears to vary considerably in different localities, but the Europeans who have been stationed at various times at the Indo-European

[•] An account of the zoology of Persian Baluchistán and of the shores of the Persian Gulf, where the conditions appear to be similar to those prevailing in Makran, is given in Eastern Persia, Vol. II, by Dr. W. T. Blanford.

CLIMATE, TEMPERA-TURE AND RAINFALL. telegraph offices on it have not found the conditions generally insalubrious. Gwádar had, indeed, to be abandoned at one time owing to its unhealthiness, which was attributed to the action of mud volcanoes in the bay, the eruptions discolouring the water and causing a stench which made life on shore absolutely intolerable; but the place now (1905) appears to be regaining its former salubrity, though strangers staying for any length of time are liable to malaria.

Both Kéch and Panjgúr have an evil reputation for unhealthiness in the summer months, fever being rife in both localities. The plague of flies at the time of the date harvest is indescribable.

Weather on the coast.

The weather on the coast is generally remarkably fine. Although Makrán lies beyond the limits of the south-west monsoon, the effects of the latter are felt from June to September in the heavy swell, the damp cloudy weather, and the lowering of the temperature. The dampness of the climate between March and September, and the higher temperature at the western end of the coast, as compared with that of the east, are marked features at this time of year. The Persian Gulf Pilot describes the weather from January to March as generally settled, but with occasional strong land breezes from the north-east and north-west. The wind in January is cutting. The weather continues fine in April and May, but it is hazy and the air is damp with strong breezes from the sea. The heat now gradually increases, especially when the hot wind is blowing from the interior. In June and July, the heat becomes oppressive until lowered by the monsoon winds from the west-south-west which continue during August and September. In the last two months, however, the air is much cooler and clearer, the swell is less, and native craft, which are drawn up on the beach at the commencement of the monsoon, put to sea again early in August. From October until December the weather is again fine, cool, and clear, with occasional rain.

Climate of the interior.

The central division includes the hottest parts of Makrán, which are little known to Europeans, but where, according to the native saying, the heat is so great in summer that eggs can be cooked and bullets melted by laying them on the sands exposed to the sun.

Here and in Panjgur the year is locally divided into three seasons: spring from March to May (tabd gwdt); summer from June to October (ámén); and winter from November extending into a short spring about February (simistán and bahdr gdh). This is the agricultural year as recognised by the cultivators. There is about a month's difference between the seasons in Kéch and Panjgur, in the latter the spring which extends into April is longer and better marked. The autumn is not recognised, though the people have a name for it, ták réch, or the fall of the leaves. It occurs in October and November. The winter is dry and healthy, and the climate in spring is not unpleasant.

CLIMATE, TEMPERA-TURE AND RAINFALL. Seasons.

During the summer, dense fogs, called nod, are not uncommon, wetting everything like rain and always appearing in the morning. The dew at night is also heavy at this time of year, for which reason, as well as to protect himself from the mosquitoes, every Makráni is provided with a mosquito curtain.

The northern division is cool in summer and cold in winter. In winter, the north or north-west wind, known as *gorich*, is particularly cutting.

Thermometer readings taken at Panjgur from May, 1892, to February, 1893, indicated the mean maximum and minimum temperature as exhibited below:--

Temperature.

	•••		•••	Maximum (Degrees).		Minimum (Degrees).	
May and J					. 102	72	
July		•••		•••	•••	103	78
August	•••		•••	•••	•••	100	73
September	•••		•••	*	•••	93	64
November	•••		٠.	•••	•••	73	44
December	•••	•••	• • •	2*	·	62	7
February					•••	58	} 41

The extreme temperature ranges from 113° in June and July to below freezing point in winter.

The rainfall is very scanty and uncertain, with long periods of drought, at times extending to two or three years. Rainfall records have not been kept for Makrán, but, at the outside, the average amount received does not exceed a few inches. Most is received in the mountains where flashes of lightning occasionally warn the inhabitants of the plains that floods may be expected in the rivers. The rain

Rainfall.

CLIMATE, TEMPERA-TURE AND RAINFALL. generally falls either in the winter from November to March, when it comes from the north-west, or during the summer in July and August, when it comes from the south-west or south-east. Rain at the former time is known as bahárgáh and at the latter as bashshám. The winter rainfall is lighter on the whole, but is more abundant in the west than in the east which receives its most copious supply from the heavier storms of the summer. Occasionally, very heavy down-pours occur, causing considerable damage to cultivation. Much diluvium was caused in this way by floods in Kéch during 1903. Besides the summer and winter falls, the only other rainfall takes place in sudden showers in April and May and is known as tarápi.

The general absence of rain and the sudden floods, caused in the plains by rain occurring in the hills, were both noticed by Alexander's army on its march through Makran, and Arrian writes: "For the country of the Gadrosians, like that of the Indians, is supplied with rains by the Etesian (monsoon) winds; but these rains do not fall on the Gadrosian plains, but on mountains to which the clouds are carried by the winds where they dissolve in rain without passing over the crests of the mountains." Arrian also mentions that one night a torrent that had become swollen by unperceived rain came rushing down with such violence that it destroyed a number of followers, women and children, and swept away the baggage and animals that had been encamped near its bed.

Winds.

The south-west monsoon sets in between the 6th of June and the 10th of July and is accompanied or preceded by wind and a heavy swell from the south-west or west-south-west. The strength of the wind, which continues up to the end of August or sometimes to the middle of September, gradually moderates. It is less felt at Gwádar than further to the east. The sea breezes are light from October to January and then increase in strength up to May. They are known inland as chili or chilim and sirr shamál. Along the coast, winds from the north-east set in during winter about midnight or some hours later, and, veering to the eastward, cease about noon on the following day. The north-wester of the Persian Gulf (shamál) blows along the coast about once a year and lasts for two or three days.

Inland, north and north-west winds (gorich) prevail from October to February, and are particularly strong towards the end of the cold weather. They carry clouds of dust and are piercingly cold, sometimes causing mortality among the flocks and even among human beings. The gorich becomes a burning hot wind at the end of March and during April and May, when it is known as liwár. The change in the gorich from cold to heat is noticed in local proverb: "Double faced gorich is pleasant at neither season: in winter it is bitter; in summer it turns into the liwár." In spring the south-west wind (jahl gwát) blows, helping to ripen the standing wheat. The jahli, and the zirr gwát, mentioned above, prevail up to the end of September. During the monsoon the east wind (sar gwát) sometimes springs up bringing rain with it.

The cyclones of the Arabian Sea do not reach the Makran coast, but heavy gales (airop) occasionally do damage; in 1899 a large number of date and mango trees were uprooted by one in Kech.

An earthquake was felt in Kolwa and Kéch in the same year restoring a spring that had dried up at Balor in the former locality. Earthquakes do not, however, appear to be of so common occurrence as in some parts of Baluchistán.

Owing to its position athwart the main line of communication between the Middle East and India, no part of Baluchistán has figured so largely in ancient annals as Makrán, in addition to which the country itself is full of legendary lore, going back to the most ancient times. Among such stories, one is told of the time of David, when the people committed suicide by entombing themselves in the small cairns (known to the Baloch as dambi) to escape from the constantly-recurring famines. The attempts of Cyrus and Semiramis to march through the country, attempts in emulation of which Alexander the Great afterwards made his famous expedition, have been recorded by ancient authors, and Firdousi sings of the District in the Shahnama as the battle-ground between the Iranian and Turánian Kings.* Makrán, we are told, formed part of the possessions of Irán during the reign of King Káús, who

climate, Temperature and Rainfall.

Cyclones.

Earthquakes.

HISTORY. Traditional period.

^{*} See East and West, May 1904. "The Country of Makran, its past History" by Shamsul-Ulama J. J. Modi.

is spoken of as touring in all his dominions including Makrán, whence he took boat to other parts of his territories. The country afterwards appears to have passed temporarily to the Turánians under Afrásiáb, who, in their turn, were again driven out by Kai Khusrau, who thus regained the country after having fought five pitched battles. The latter is said to have remained a year in Makrán and to have effected much improvement in the agricultural condition of the country by importing expert cultivators from all parts of the world, ordering them to lay out fruit gardens and attend to the pasture grounds for his horses and hunting grounds. On leaving, he appointed one Ashkash as Governor, and it may have been the latter who named the two káréses in Turbat, still known as the Kaúsi and Khusrawi, after his royal patrons.

Another hero of the Sháhnáma, round whose name local tradition is woven, is that of Bahman, son of Asfandiár, there being both a Bahmani damb, or mound, in Turbat, and a Bahmani kárés. According to the local story, Bahman's death occurred in the Apsar jungle near Turbat, where he was swallowed by a dragon in the presence of Rustam's grandson, Barzén, who, to fulfil a vow which he had been forced to take when captured by Bahman, never to draw the sword in the latter's presence, refused to move a finger to help the enemy of his family, but cut the dragon down when Bahman had been swallowed. exclaiming: "I have killed Bahman to avenge my grandfather's death, and I have killed the dragon to avenge that of Bahman." Barzén's words now form the burden of a Baluchi song, and the story illustrates the familiarity of the people with Iranian names and legends.

Alexander the Great.

According to the Shahnama, Makran paid allegiance to Kai Kaus, Kai Khusrau, Lehrasp, Gushtasp, Bahman, Huma and Darab, and we pass from them to Alexander the Great, whose march through Makran in 325 B.C. is a landmark in the history of the District. The story may be given in Arrian's own words. Gadrôsia, it may be premised, denotes the inland region which extended from the Oreitai (Las Béla) to Karmania (Kirmán). The coast line is described as the country of Ichthyophagoi.

. "He (Alexander)* then took again the half of the Hypaspists and Agrianians, and the corps of cavalry and the horse-archers, and marched forward to the frontiers of the Gadrôsoi and the Oreitai, where he was informed his way would lie through a narrow defile, before which the combined forces of the Oreitai and the Gadrôsoi were lying encamped, resolved to prevent his passage. They were in fact drawn up there, but when they were apprised of Alexander's approach, most of them deserted the posts they were guarding, and fled from the pass. Then the leaders of the Oreitai came to him to surrender themselves and their nation. He ordered them to collect the multitude of the Oreitai, and send them away to their homes, since they were not to be subjected to any bad treatment. Over these people he placed Apollophanes as satrap. Along with him he left Leonnatos, an officer of the bodyguard, in Ora, † in command of all the Agrianians, some of the archers and cavalry, and the rest of the Grecian mercenary infantry and cavalry, and instructed him to remain in the country till the fleet sailed past its shores, to settle a colony in the city, and establish order among the Oreitai, so that they might be readier to pay respect and obedience to the satrap. He himself, with the great bulk of the army (for Hêphaistion had now rejoined him with his detachment), advanced to the country of the Gadrôsoi by a route mostly desert.

"Thence he marched through the country of the Gadrôsoi, by a difficult route, on which it was scarcely possible to procure the necessaries of life, and which often failed to yield water for the army. They were, besides, compelled to march most of the way by night, and at too great a distance from the sea; for Alexander wished to go along the sea-coast, both to see what harbours it had, and to make, in the course of his march, whatever preparations were possible for the benefit of the fleet, either by making his men dig wells, or to seek out markets and anchorages. The maritime parts of Gadrôsia

HISTORY.

^{• &}quot;Arrian's Anabasis", book VI, chapter XXII, quoted in McCrindle's Ancient India; its Invasion by Alexander the Great, page 169.

[†] McCrindle's Ancient India contains several very interesting notes on the identification of the places mentioned by Arrian.

were, however, entirely desert. Nevertheless, he sent Thoas, the son of Mandradoros, down to the sea with a few horsemen, to see if there happened to be any anchorage or water not far from the sea, or anything else that could supply the wants of the fleet. This man, on returning, reported that he found some fishermen upon the beach living in stifling huts, which had been constructed by heaping up mussel shells, while the roofs were formed of the backbones of fish. He also reported that these fishermen had only scanty supplies of water, obtained with difficulty by their digging through the shingle, and that what they got was far from sweet.*

"When Alexander came to a district of the Gadrôsian country where corn was more abundant, he seized it, placed it upon the beasts of burden, and having marked it with his own seal, ordered it to be conveyed to the sea. But when he was coming to the halting station nearest the sea, the soldiers paid but little regard to the seal, and even the guards themselves made use of the corn and gave a share of it to such as were most pinched with hunger. Indeed, they were so overcome by their sufferings that, as reason dictated, they took more account of the impending danger with which they now stood face to face, than of the unseen and remote danger of the king's resentment. Alexander. however, forgave the offenders, when made aware of the necessity which had prompted their act. He himself scoured the country in search of provisions, and sent Krêtheus, the Kallatian, with all the supplies he could collect for the use of the army which was sailing round with the fleet. He also ordered the natives to grind all the corn they could collect in the interior districts, and convey it, for sale to the army, along with dates and sheep. He, besides, sent Telephos, one of the companions, to another locality with a small supply of ground corn.

"He then advanced towards the capital of the Gadrosôi, called Poura, and arrived there in sixty days after he had started from Ora. Most of Alexander's historians admit that all the hardships which his army suffered in Asia are not to be compared with the miseries which it here experienced. Nearchos is the only author who says that Alexander did not take that route in ignorance of its difficulty, but that he chose

[•] Water on the coast is still obtained in the same way - Ed.

it on learning that no one had as yet traversed it with an army except Semiramis, when she fled from India. natives of the country say that she escaped with only twenty men of all her army, while even Cyrus, the son of Kambyses. escaped with only seven. For Cyrus, they say, did in truth enter this region to invade India, but lost, before reaching it, the greater part of his army from the difficulties which beset his march through the desert. When Alexander heard these accounts, he was seized, it is said, with an ambition to outrival both Cyrus and Semiramis. Nearchos says that this motive, added to his desire to be near the coast in order to keep the fleet supplied with provisions, induced him to march by this route; but that the blazing heat and want of water destroyed a great part of the army, and especially the beasts of burden, which perished from the great depth of the sand, and the heat which scorched like fire, while a great many died of thirst. For they met, he says, with lofty ridges of deep sand not hard and compact, but so loose that those who stepped on it sank down as into mud or rather into untrodden snow. The horses and mules, besides, suffered still more severely both in ascending and descending the ridges, because the road was not only uneven but wanted firmness. The great distances also between the stages were most distressing to the army, compelled as it was at times from want of water to make marches above the ordinary length. they traversed by night all the stage they had to complete and came to water in the morning, their distress was all but entirely relieved. But, if, as the day advanced, they were caught still marching owing to the great length of the stage, then suffer they did, tortured alike by raging heat and thirst unquenchable.

"The soldiers destroyed many of the beasts of burden of their own accord. For, when their provisions ran short, they came together and killed most of the horses and mules. They ate the flesh of these animals, which they professed had died of thirst and perished from the heat. No one cared to look very narrowly into the exact nature of what was being done, both because of the prevailing distress and also because all were alike implicated in the same offence. Alexander himself was not unaware of what was going on, but he saw that the remedy for the existing state

of things was to pretend ignorance of it, rather than permit it as a matter that lay within his cognisance. It was therefore no longer easy to convey the soldiers labouring under sickness nor others who had fallen behind on the march from exhaustion. This arose not only from the want of beasts of burden but also because the men themselves took to destroying the waggons, when they could no longer drag them forward owing to the deepness of the sand. They had done this even in the early stages of the march, because for the sake of the waggons they had to go not by the shortest roads but those easiest for carriages. Thus some were left behind on the road from sickness, others from fatigue or the effects of the heat or intolerable thirst, while there were none who could take them forward or remain to attend them in their sickness. For the army marched on apace, and in the anxiety for its safety as a whole, the care of individuals was of necessity disregarded. As they generally made their marches by night, some of the men were overcome by sleep on the way, but on awaking afterwards, those who still had some strength left, followed close on the track of the army and a few out of many saved their lives by overtaking it. The majority perished in the sand like the shipwrecked men

"Another disaster also befell the army which seriously affected the men themselves as well as the horses and the beasts of burden. For the country of the Gadrôsians, like that of the Indians, is supplied with rains by the Etesian winds; but these rains do not fall on the Gadrôsian plains, but on the mountains to which the clouds are carried by the wind, where they dissolve in rain without passing over the crests of the mountains. When the army on one occasion lay encamped for the night near a small winter torrent for the sake of its water, the torrent, which passes that way, about the second watch of the night became swollen by rains, which had fallen unperceived by the army, and came rushing down with so great a deluge that it destroyed most of the women and the children of the camp followers, and swept away all the royal baggage and whatever beasts of burden were still left. The soldiers themselves, after a hard struggle, barely escaped with their lives, and a portion

only of their weapons. Many of them besides came by their death through drinking, for, if, when jaded by the broiling heat and thirst, they fell in with abundance of water, they quaffed it with insatiable avidity till they killed themselves. For this reason Alexander generally pitched his camp not in the immediate vicinity of the watering-places, but some twenty stadia off, to prevent the men and beasts from rushing in crowds into the water to the danger of their lives as well as to prohibit those who had no self-control from polluting the water for the rest of the troops by their stepping into the springs or streams.

"Here I feel myself bound not to pass over in silence a noble act performed by Alexander, perhaps the noblest in. his record, which occurred either in this country or, as. some other authors have asserted, still earlier, among the Parapamisadai. The story is this. The army was prosecuting its march through the sand under a sun already blazing high, because a halt could not be made till water, which lay on the way farther on, was reached, and Alexander himself, though distressed with thirst, was, nevertheless, with pain and difficulty marching on foot at the head of his army, that the soldiers might, as they usually do in a case of the kind, more cheerfully bear their hardships when they saw the misery equalised. But, in the meantime, some of the light armed soldiers, starting off from the army, found water collected in the shallow bed of a torrent in a small and impure spring. Having with difficulty collected this water, they hastened off to Alexander as if they were the bearers of some great boon. As soon as they came near the king, they poured the water in a helmet, and offered it to him He took it and thanked the men who brought it, but at. once poured it upon the ground in the sight of all. By this deed the whole army was inspired with fresh vigour to such a degree, that one would have imagined that the water. poured out by Alexander had supplied a draught to the men all round. This indeed I commend above all' others, as it exhibits Alexander's power of endurance as well as his wonderful tact in the management of an army.

"The army met also with the following adventure in this country. The guides, becoming uncertain of the way, at

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last declared that they could no longer recognise it, because all its tracks had been obliterated by the sands which the wind blew over them. Amid the deep sands, moreover, which had been everywhere heaped up to a uniform level. nothing rose up from which they could conjecture their path, not even the usual fringe of trees, nor so much as the sure landmark of a hillcrest. Nor had they practised the art of finding their way by observation of the stars by night or of the sun by day as sailors do by watching one or the other, of the Bears-the Phœnicians, the Lesser Bear, and all other nations, the Greater. Alexander, at last perceiving that he should direct his march to the left, rode away forward. taking a small party of horsemen with him. But when their horses were tired out by the heat, he left most of his escort behind, and rode on with only five men and found the sea. Having scraped away the shingle on the beach, he found water, both fresh and pure, and then went back and brought his whole army to this place. And for seven days he marched along the sea-coast, and procured water from the beach. As the guides by this time knew the way, he led his expedition thence into the interior parts."

Sir Thomas Holdich has traced Alexander's route as following the coast to the north of the Hingol river, when he turned northward and passed through the mountains at the back of the Táloi ridge of the Makrán Coast Range, emerging on the shore between Kalmat and Pasni, along which he continued to Gwattar.* From this point the army turned northward towards Bampúr.

While Alexander was traversing the interior of Makrán, Nearchos, his admiral, was making his way with a fleet of small boats along the coast, starting from the mouth of the Indus. Arrian and other writers have given a full itinerary of his journey, and both Holdich and Mockler thave discussed the identification of various places mentioned therein. Starting from Kalmat, Mockler has

^{*} Journal of the United Service Institution of India, Vol. XXIII, No. 116, April to June 1894.

[†] Paper on the identification of places on the Makran coast mentioned by Arrian, Ptolemy and Marcian, by Major E. Mockler. Journal of the Royal Asiatic Society, Vol. IX, Part II, April 1879.

identified the following places up to Téz, which is close to Chahbár:—

HISTORY.

Kalama=Kalmat.
Balomus=Barambáb.
Bárna=Gwádar.
Derenobosa=Western extremity
of Gwádar headland.

Kophas=Píshukán bay. Kuidza=Pasábandin or Chidizai.

Bagia=Cape Brês. Talmena=Chahbár.

Another point on which all authorities agree is the identity of Malána with Ras Malán on the Las Béla coast,

During the two thousand and odd years, however, which have elapsed since the voyage took place, the configuration of the coast has undergone so much change that few places can now be identified with certainty, and speculation will no doubt continue, except in the case of Calama and Malána, the identity of which with Kalmat and Ras Malán seems to be satisfactorily established.

The Seleucids.

Mr. Vincent Smith mentions that in the course of the internecine struggles that followed the death of Alexander between his generals, two had emerged as competitors for supreme power in Asia, Antigonos and Seleukos Nikator. In 312 B.C. the latter recovered possession* of Babylon, and within a period of six years became the lord of central and western Asia. The eastern provinces of his realms extended to the borders of India, and Makrán was included in his possessions. He had presumably marched through Makrán, and crossed the Indus in 305 B.C. when he was met and defeated by Chandragupta, the Rája of Magadha, and was obliged to retire and conclude a humiliating peace, by which he ceded Makrán with several other provinces to the Rája in 303 B.C.

The Sissanians

We now lose sight of Makran for many centuries, but it appears again in the fifth century of the Christian era as an Indian possession, when Shermah, Malik of Hind, gave his daughter in marriage to Bahram-i-Gor (404 to 427 A.D.), the fourteenth sovereign of the Sassanian dynasty, and, as a portion of her dower, conferred on her "the country of Sind and the territory of Makran." Presumably, it remained in the hands of the Sassanians for the next two centuries, for Khusrau Parvéz (591 to 628 A.D.) is mentioned as having recovered the eastern provinces

^{*} Early History of India, by V. Smith, p. 111.

of his father's kingdom towards the Indus," which had revolted.

The Brahof Sind.

About this time the rise of the Brahman dynasty took man Dynasty place in Sind, and Rai Chach marched in 635-6 to Kirman to determine the boundary of his dominions.

Chach marches to Kirmán and defines the boundary of Makrán.

The Chachnama gives the following account of this episode: †. "When Chach had settled these matters, he made up his mind to determine the boundary of Kirman, which was adjacent to the possessions of the chiefs of Hind. † At this time two years had elapsed since the Hijra of the Prophet of God, -may peace be to him. After the death of Kisra bin Hurmaz bin Fars, and the disruptions of his dominions, the management of the affairs of the kingdom devolved upon a woman. When Chach was informed of this, he determined to go to Kirmán with a considerable force. At an auspicious time, which was fixed by the astrologers, he marched towards Armabel. § and when he arrived there, the chief of the place came to receive him. Chach proceeded from thence to Makran. Every chief that was met offered his submission. When he had crossed the province of Makran and the hills he entered another district. There was an old fort here called Kanarpur. He ordered it to be re-built; and according to the Hindu custom a naubat of five musical instruments was ordered to be played every evening and morning in the fort. He collected all the people of the surrounding villages and completed the building. He marched from this place towards Kirman, and halted on the banks of a river which runs between There he fixed the eastern the country and Makran. boundary, that is the boundary between Makran and Kirman, and planted numerous date trees there upon the banks of the stream, and he set up a mark saying: 'This was the boundary of Hind in the time of Chach bin Silaij bin Basabas. Now that boundary has come into our possession."

Arab period.

Makran, therefore, must have been in possession of Sind when the Arab invasions took place, and from this time the

^{*}Elliot's History of India, Volume I, page 407.

[†] Elliot's History of India, Volume I, page 157.

¹⁶³⁵⁻⁶ A.D.

[§] i.e., Béla,

history of the country emerges for a space into the light of ascertained history.*

HISTORY.

The Arabs directed their attention towards Makran soon after the death of the Prophet, and in answer to enquiries from the Caliph, Abú Músá, Ashari, who had been appointed to the governorship of Irák (Basra), replied, on the authority of one of his officers who had been sent on a scouting expedition to Makran and Kirman, that "the King of Hind and Sind was powerful and contumacious, following the path of unrighteousness and that sin dwelt in his heart." The idea of an expedition was, for the time being, dropped, but on the conquest of Persia, the Arab generals, lured by the fabulous wealth of India, pushed on towards the east, and Abdulla bin Abdulla led an invasion against Makrán in the last year of Umar's Caliphate (634 to 643). The ruler of Makrán, a Malik named Sáád, managed to offer a stubborn resistance with the help of large reinforcements, which were sent to him from Sind, but was eventually defeated with heavy loss in a sanguinary battle, and Makrán fell into the hands of the victors.† Abdulla immediately reported the victory to the Caliph by the means of a messenger, who gave the following description of the country:-"Commander of the faithful, it is a country of which the mountains are mountains indeed, and the plains of which are real mountains; it is a country with so little water that its dates are the worst of dates, and the inhabitants are the most warlike of men. If thou hadst a less numerous army there, it would be annihilated and could do nothing; and if thy army is considerable, it will perish of hunger, because there are no victuals. The country beyond is still worse." Upon this Umar appears to have issued instructions to his officers, discouraging any attempt to conquer Sind.

Meanwhile, Makran seems to have been made a base for the officer in charge of the Indian frontier, and it was while

[•] The Editor is chiefly indebted to Elliot's *History of India* (Dawson's edition), Vol. I., Note B., Appendix, for the material used in the following sketch of the Arab period.

[†] With reference to the name of this Malik, it is a curious fact that a káres exists near Kalátuk, known as Sáádábád, the construction of which is attributed locally to an Arab ruler.—Ed.

the army under Taghar bin Dair was engaged in effecting the reduction of Kaikanan (which is probably in the neighbourhood of the modern Nál), that the quarrels at home culminated in the assassination of Ali and the succession of Muáwiya, the first Umáyid, to the Caliphate. The Arabs appear to have been completely defeated near Kaikánán in a subsequent expedition under Abdulla bin Suár. and only a small remnant returned to Makrán. Sinán-bin: Salama, whose lament on being ordered to Makran is recorded on the title page of this volume, succeeded Abdulla in the supreme command of the forces, and proceeded to take up his residence and found citiesin Makran. He was afterwards superseded by Rashid, who made a successful inroad on Kaikanan, but was slain in an attack upon the Méds, and Sinán was once more reinstated. He extended the Arab conquest still further eastward and was treacherously slain in Kachhi. The dissensions at home left Muawiva's successors little leisure to attend to the extension of the empire, and it was not until the time when Abdul Malik (684 to 705) had re-established the authority of the Umayids over the Muhammadan empire, that he appointed Hajjáj to be governor of Irák, who commenced his rule by conferring the charge of Makran upon Said bin Aslam, Kalábi. Said, however, had to encounter the bitter rivalry of the Allasis, and was eventually killed by them, Makran thereupon falling into their hands. They subsequently retired on Sind. Said's successor, Mujáa, only held office for a year, when he died in Makrán (705 A.D.) On the accession of Walid (705 to 715), Muhammad bin Hárún, surnamed Makráni, was appointed to Makran and the Indian frontier. He assisted with reinforcements the army under Budail, which had been ordered to advance towards the lower course of the Indus, in order to exact vengeance for the plunder, by the Méd and Kurk pirates of Debal, of eight vessels which the ruler of Ceylon had despatched to the Caliph. The expedition, however, met with a disaster and Budail was slain.

It was now that Muhammad bin Kasim, a youth scarcely out of his teens, was nominated by Hajjaj to the supreme command of the Indian frontier. He was joined on advancing by Muhammad Harun, who, however, died and was

buried at Béla. Muhammad bin Kásim's subsequent conquest of Sind is not relevant to this work. After it had been accomplished, Makrán appears to have been amalgamated with Sind for administrative purposes and the seat of government was apparently transferred to the newly conquered province.

The country now once more disappears from view, but in the tenth century Ibn Haukal notices that the ruler was an Arab. Isa bin Madán, who had established his residence in the city of Kiz (Kéch), which was about half the size of Multán. Frequent references to Makrán are made by other Arab geographers of the period, Ibn Khurdadba, Al Istakhri and Al Idrisi, all of whom agree in describing the country as "for the most part desert."

During the next seven centuries, Makran appears to have The Country come under the temporary influence of many foreign dynasties, which followed one another in quick succession, but their power was short lived and, while the successive waves of conquest were sweeping across the country. leaving little or no permanent impression, local rulers exercised internal authority. After each successful invasion, these rulers were doubtless forced to pay tribute to their conquerors, but it was not till the time of Nasír Khán I (1750-51 to 1793-4) that they were compelled to permanently alienate half the revenue of the country to the rising power of Kalát. Local tradition assigns the following order to the local rulers: -Hots, Rinds, Maliks, Bulédais and Gichkis. No details are given of the two first, but the Hots are alleged to have succeeded the Arab governors. earliest Malik, of whom historical evidence exists, is a Tajuddin, who is mentioned as ruling Makran in the time of Ghias-ud-din, the first Ghorid prince, who ruled from 1157 to 1202,* and it may be presumed, therefore, that the Hots and Rinds held sway about the eleventh and twelfth centuries.

The foreign dynasties which exercised temporary suzerainty over the country, included the Deilamis, the Seljúks, the Ghaznivids, the Ghorids and the Mongols. Indeed, the fortunes of Makran appear to have been almost identical with those of Kirmán. There is no evidence that the country was ever subject to the Mughal Emperors of Delhi.

HISTORY.

in the Middle

Foreign Invaders.

Raverty's Tabakat-i-Nasiri, Vol. I, page 390.

HISTORY,

The Deilamis appear to have held Makran, as Sykes mentions that in 1028 Abul Favaris led a force from Kirman and Makrán to operate against Shiráz, but died on the way.* Shortly afterwards, in 1031, the district was subdued by Masúd, the Ghaznavid. Malik Káward, the founder of the Seljúk dynasty of Kirmán, next extended his power over the country, but on the overthrow of the Seljuks by the Ghuzz Turks in the twelfth century, Makran fell into the hands of the latter. They were followed by the Ghorids, but, at the beginning of the thirteenth century, the country was conquered from Kirmán on behalf of the Khwárazm rulers of Khiva. It was at this time that the Mongol hordes swept across Asia and in 1223, Chingiz Khán's son, Chagatai, was despatched to lay Makrán waste and cut off the retreat of the ruler of Khiva, Sultan Jalaluddin. Two cliffs, one on the Gokprosh hills, and the other to the north of Sámi, known as Mughal-é-gatt (the Mughal's precipice) still mark this event. Jaláluddín passed through Makrán on his way to Kirmán in the following year, and subsequently one Burák, the Kará Khitái, held the country temporarily as a feudatory of the Mongols. In the following centuries, the rulers of Kirmán appear to have wielded any paramount influence that was exercised in the country, and we hear of an expedition by Amír Adugui, on whom Tímúr had conferred Kirmán at the beginning of the fifteenth century, which penetrated as far as Kéch.

Portuguese attacks.

Towards the beginning of the sixteenth century, the Portuguese found their way to India and captured several places along the Makrán coast. They do not appear to have penetrated inland. On several occasions they came into collision with the Kalmatis and two old guns, now (1904) lying at Gwadar and one at Pasni, are popularly supposed to have been captured from them. 1581 they burnt Pasni and Gwadar.†

The Maliks.

Local rulers. It is impossible to establish the identity of the Maliks of Makrán with certainty, but there appear to be good reasons for believing that they were connected with the Saffárid Maliks of Seistán. In the ninth century, Makrán temporarily

[•] Ten Thousand Miles in Persia, by Major Percy Molesworth Sykes.

[†] See Manuel de Faria Y. Souza's Portuguese India, translated by Captain J. Stevens. London, 1695.

formed part of the kingdom of Umar bin Lais, the founder of the Saffarid dynasty, and frequent traces of the Seistan Maliks are to be found in the adjoining country of Kharan. The earliest Malik known to us is the Tajuddín, already mentioned, who was ruling at the end of the twelfth century, but this name does not appear in the local list of rulers who were Malik Said, Malik Ziauddín, Malik Badr, Malik Zahid, Malik Dínar, Malik Jalaluddín, Malik Muhammad Shah, Malik Muzaffar Shah, Malik Husain, Malik Farrukh, Malik Bahadur and Malik Mirza. This list, however, as will be presently seen, is apparently incomplete.

Presumably Marco Polo spoke of an independent Malik dynasty, when he referred to the country at the end of the thirteenth century as follows:—"Kesmacoran* is a kingdom having a king of its own and a peculiar language. Some of the people are idolaters, but the most part are Saracens*"

The power of the Maliks is said to have attained its zenith in the time of one Malik Kuchko, whose name also does not appear in the list, but whose rule is alleged to have extended to Maliki Chédag, the Malik's cairn, near Mínáb. The country at this time is said to have contained a numerous population, and there was a high degree of civilization. Malik Jaláluddín's time was distinguished by what appears to have been a great tidal wave, which is said to have laid waste the Dasht river and to have penetrated even the Kech valley. Malik Muzaffar Shah was a dissolute ruffian and quarrelled with the Hots, who, thereupon, migrated to Sar Makran, the name by which Kolwa was then known. The great Baloch migration eastward took place in the fifteenth century and may possibly have had some connection with the tyrannical proceedings of Muzaffar Shah. The approximate date of the last Malik can be authentically fixed, as he is mentioned by Major Sykes as succeeding one Malik Shamsuddin in Makrán, after the latter had been defeated and taken prisoner by Ganj Ali Khán, the ruler of Kirmán, who led an invasion against Makrán in 1613. Malik Mirza was killed by the Bulédais, and with him the Maliks disappear from the scene.

All local authorities agree, in attributing the origin of the Bulédais to a common ancestor, Bu-Said, who is stated to

The Bulédais.

have come either from Garmsél in the Helmand valley or The former story appears to be more from Maskat. probable, as the Bulédais were admittedly Zikris, and their arrival in Makrán was probably contemporaneous with the rise of the Zikri sect, which took place in the fifteenth century. The Bu-Said, who founded the Bulédais, is also stated to have been connected with the present rulers of Maskat. The name Bulédai was taken from the valley of the Buléda where the Bulédais resided. Assuming that the date of Bu-Sáid's arrival in Makrán, as given above, is correct, a considerable time had elapsed before they acquired supremacy in the country at the beginning of the seventeenth century. The names of their rulers were as follows:—Sheh Bu Saíd, Shukrulla, Sheh Kásim, Sheh Zehri, Sheh Husain, Sheh Ahmad, Sheh Abdulla and Sheh Kasim. Bu Said is, doubtless, shown in the list as the founder of the family, and was probably not one of the actual rulers. Nothing is known of the rule of the Bulédais, but an inscription on a grave stone over the grave of Omar and Maho near Sami refers to Sheh Zehri, and a tombstone was observed by Colonel Ross at Gwadar stating that it had been engraved in 1142 A.H. (1729-30 A.D.) "in the badshahi (reign) of Sheh Bilar "* Sheh Bilar was the uncle of Sheh Kasim, the last Bulédai.

The Bulédai rule terminated with Sheh Kasim about 1740. The Gichki power had been gradually growing, and by the beginning of the eighteenth century the Gichkis appear to have held more of the country than the Bulédais. Bilár, Sheh Kásim Bulédai's uncle, had forsaken the Zikri faith for Islám and, on advancing from Gwádar, was defeated by Malik Dinár, Gichki, with the help of the Zikris, and slain. Sheh Kasim then appealed to Nadir Shah who ordered his general, Taki Khan, then about to co-operate with him through Makrán in an attack on India, to invade Kéch. This was in 1739. Nádir, meanwhile, found himself able to dispense with the aid of Taki Khan and, on the latter's retirement, Gwadar, the last Bulédai stronghold, fell into Malik Dínár's hands. No Bulédais are now to be found in Makrán, but some are still living in Geh and Kasrkand across the border.

Ross's Memorandum on Makrán, page 35 .

An account of the origin and rise of the Gichkis will be found in the section on Population. Like the Bulédais they, too, were Zikris and the sect obtained much influence The Gichkis. under Mullá Murád and his son, Malik Dínár. With the downfall of the Bulédais, the Gichkis found themselves masters of the country, the older branch holding Panigur and the younger Kéch and Gwádar. But the Ahmadzai Kháns of Kalát had already cast greedy eyes on the country and Mir Abdulla (1715-16 to 1730-31) had led an expedition as far as Kulánch about 1723. Internal dissensions between Malik Dínár and his son, Sheh Umar, on the one hand, and Mir Allahdad of Panjgur on the other, gave Mir Muhabbat (1730-31 to 1750-51) an excuse for interference, and his brother and successor, Mir Nasir Khán I, largely influenced by hatred of the Zikris, despatched nine expeditions into the country.

invasions.

Details of the operations undertaken by Nasír Khán I will The Bráhui be found in Tate's History of the Ahmadsai Kháns of Kalát. They met with varying success and some of them were of little importance, but they ended in the division of the revenues of the country between the Gichkis and the Khán.

The first expedition was directed against Panigur at the instance of Mír Allahdád's grandson, Karam Sháh, son of Mir Isa, who had been driven to Kalat by dissensions with his uncle, Mír Gáji, in the course of which his father had been killed. Nasír Khán subjugated Panjgúr, but soon afterwards was obliged to send a force under Akhund Mullá Muhammad Hayát to quell a disturbance which had broken out. The Kalát chief next appears to have directed his attention towards Kéch, and took possession of Násirábád after a sanguinary battle. The aid of Ahmad Shah, Durráni, was thereupon invoked by the Gichkis, and Nasír Khán beat a hasty retreat to Kalát on receipt of peremptory orders from the Afghan sovereign. A fresh expedition was shortly afterwards despatched against Malik Dínár, which resulted in the latter being brought prisoner to Kalát, where he was cruelly murdered. A rebellion broke out in Kéch, but Malik Dínár's son, Sheh Umar, was won over by Nasír Khán and permitted to retain his power in that district. Sheh Umar had become a convert from the Zikri faith to Islam, thereby rendering himself a persona grata in the eyes

of the orthodox Khan of Kalat. Continued disturbances once again brought Nasír Khán to the country by forced marches from Gandáva in 1758, and Sheh Umar, who had been turned out by his younger brother, Shukrulla, was reinstated. The chronic anarchy of the country, demanding, as it did, constant armed intervention, had by this time opened Nasír Khán's eyes to the difficulty of holding the country without the support of the local chiefs, while at the same time Sheh Umar and the Gichki chief of Panigur realised that their position in the country would not be secure against the Zikris without assistance from Kalát. A mutual understanding was, therefore, arrived at between the two Gichki chiefs and the Khán, by which half the revenues of the country were to be made over annually to Kalát, the administration remaining in the hands of the Gichkis. The exact date of this event is unknown, but it apparently took place previous to 1778, as a sanad in possession of one Kauhdá Kénagi of Dasht, dated that year, speaks of assistance rendered to Sheh Umar against the Zikris.

Sheh Umar, however, was assassinated by the Bulédais soon afterwards, and the disturbed condition of the country necessitated three more expeditions being led against it. Nasír Khán is said to have taken the opportunity thus afforded of extending his power to the cairn of the Maliks (Maliki Chédag) on the Mínáb river. He also made over his moiety of the revenues of Gwádar as subsistence allowance to a brother of the Sultán of Maskat, at that time a refugee in Makrán. The complicated position, which subsequently resulted from this act, will be referred to in the article on Gwádar in the Miniature Gazetteer.

Appointments of naibs by the Khan. The Gichkis appear to have made frequent efforts to throw off the Kalát yoke after the acquisition of half the revenues of the country by Nasír Khán, and temporarily recovered their independence in the time of Mir Mahmud, the son and successor of Mir Nasír Khán, but Mehráb Khán, who came to the masnad in 1816-17, regained the ascendancy in the early part of his reign. He appears to have adopted the system of placing his own representative in the country, and in the course of a last effort by Sheh Kásim, Gichki, Chief of Kéch, to throw off the Kalát domination, about 1831, the Khán's ndið was killed. Mehráb Khán eventually appointed

Fakir Muhammad, Bizanjau, as his ndib in Kéch and he was ruling in the country when Háji Abdun Nabi visited it in 1838-9. Fakir Muhammad represented the Khán for more than forty years. He was a man of great tact and energy, and was wise enough to ally himself by marriage with the Gichkis, thus acquiring undivided control over the whole country.

British attention was first directed to Makrán at the time of the outbreak of the first Afghán war, when Major Leech deputed Haji Abdun Nabi to visit the country from Kalát in 1838-9. An interesting account of the latter's journey has been preserved in the Journal of the Asiatic Society of Bengal.* The country again came into prominence when the erection of the Indo-European telegraph line was under discussion, and Major Goldsmid was deputed in 1861-2 to ascertain the extent of coast in possession of each of the local chiefs. Further reference to his proceedings will be found in the section on Communications. On the erection of the telegraph, an Assistant Political Agent was posted to Gwádar in 1863.

Major Goldsmid's investigations, which were continued in the following years, led to the discovery that Persia had been showing much activity in these regions. She had been steadily advancing eastwards, and there seemed every likelihood of these encroachments being carried still further. was followed in 1869 by the seizure of Pishin by the Persians under Ibráhím Khán, governor of Bampúr, but the Government of India, acting on behalf of the Khán of Kalát, interposed, and his further advance was stopped. Arrangements were then made for a joint commission of British, Persian and Kalát delegates to assemble, and Major-General Sir F. Goldsmid was appointed as British Commissioner. had been originally intended that he should undertake the demarcation of the boundary between Afghánistán and Persia, but this being impossible, owing to trouble in Afghánistán, his progress was diverted to Makrán. British Commission was joined by the Persian Commissioner, Mirza Masúm Khán, at Tehrán, on the 25th of October 1871, but various obstacles occurred, which prevented the mission reaching Bampur in Persian Baluchistán till the 28th of January 1872.

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British supremacy.

Settlement of the western boundary of the country.

[.] Nos. CLIII and CLIV of 1844.

General Goldsmid at this time had received no special instructions to guide him with regard to his proceedings in Makrán, so he proposed to march in the direction of Jalk and the northernmost point of the Perso-Kalát frontier, and pass down thence along the whole line to Gwetter Bay. Before entering Baluchistán, he had expressed a wish to meet the Kalát Commissioner, Mír Fakír Muhammad, Bizanjau, in the neighbourhood of the northern frontier, so that the joint commission might be complete and work in an orthodox manner: but his intentions were frustrated by the unexpected arrival at Bampúr of Major Harrison, Political Agent, Kalát; Major Ross, Political Assistant, Gwàdar; Captain Lovett, R.E., and Dr. Bowman with the Kalát Commissioner and nearly 300 followers. Not unnaturally, they were unwelcome to the local governor, Ibráhim Khán, and the Persians took advantage of the occasion to raise obstacles in the way of a fair discussion, by assuming that the British Commissioner had concealed his preliminary dispositions, and complaining of the procedure adopted. the sequel, Sir F. Goldsmid was compelled to adjourn the meeting of the Commissioners to the actual frontier. Here, too, he failed to secure the attendance and co-operation of his Persian colleague, and finally, in default of definite instructions, and to get the benefit of immediate telegraphic communication with Tehrán and Calcutta, moved down to Gwadar on the sea coast. Before doing so, however, he made arrangements to have the country in the vicinity of the boundary line, so far as his personal knowledge and observation had gone, surveyed by Captain Lovett, R.E. Captain Lovett rejoined General Goldsmid at Gwádar on the 21st of March. The information he had acquired on the actual frontier was not so full as might have been wished, but was held to be sufficiently reliable to form the groundwork of practical negotiation.

Mír Masúm Khán, the Persian Commissioner, arrived at Gwádar on the 11th of April and remained as a guest of the British Commissioner until the 24th when he returned to Cháhbár, without any progress having been made with the negotiations. He had, however, an opportunity of seeing that Gwádar, at any rate, was not in possession of the Persians.

The Persian Government had expressed a strong desire that the question should be referred to Tehran for final settlement, and, as the British Government had no objection, General Goldsmid was ordered to proceed again to the Persian capital, and in conjunction with Her Majesty's Minister there, to endeavour to settle the boundary satisfactorily. Here, after protracted negotiations, the boundary as laid down on the map by Captain Lovett was finally accepted by both parties on the 24th of September 1872.

In the years that followed, the internal condition of Makrán was far from satisfactory, the country being continually disturbed by local feuds, in which the Naushérwánis took a prominent part. It was while one of them was proceeding, that Sir Charles MacGregor * passed through the country in 1877 and found Azád Khán, the Chief of Khárán, ready to attack Mír Gájián, the sardar of Panjgúr and the Khán's náib. Azád Khán had espoused the cause of Mír Isa, uncle of Gájián, who had been ousted by Mír Khudádád Khán of Kalát from the office of náib and from the Chiefship.

The disputes culminated in an expedition being led against Panjgúr in 1882 by Mír Nauroz Khán, son of Azád Khán, in the course of which Mír Gájián was killed. This led to Sir Robert Sandeman's visit to the country in 1883-4 and the settlement of all outstanding disputes. The administrative matters to which Sir Robert Sandeman devoted special attention will be found detailed in the chapter on Administration.

Sir Robert Sandeman also took steps to compose the differences which had arisen between the Rinds of Mand and the subjects of Kalát on the one hand, and those of Maskat at Gwádar on the other. Difficulties had commenced in 1876, when the Wáli of Gwádar's refusal to surrender some fugitive slaves of the Rinds kindled their resentment, which took the form of active aggression. The Indo-European telegraph line was cut, and other outrages were committed. At length, in July 1879, an affray also took place between the Maskat soldiery and some Rind traders, in which three of the latter were killed and seven wounded. From 1880 to 1883 matters were quiet, but, in January of the latter year, an attack was made

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Later developments and establishment of British control.

Sir C. MacGregor's Wanderings in Baluchistan.

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on a party of men employed by the Telegraph Department which was working in the District. On arriving at Tump, Sir Robert Sandeman appointed a committee to investigate the claims brought forward by the Kalát subjects and the counter-claims of the Rinds, and most of the cases were settled satisfactorily. The enquiry into the cases in which Maskat subjects were concerned was postponed till Sir Robert Sandeman's arrival at Gwádar, but eventually could not take place owing to the Wáli's disinclination to incur any responsibility. It was not until March 1885, when an enquiry was made by a committee consisting of Colonel Reynolds, Colonel Miles, and Mr. Ffinch, that matters were finally decided.

Recent events.

The expedition of 1883-4 was the first of a series of visits paid by British officers to the country, details of which will be found in the chapter already referred to. Sir Robert Sandeman again visited the country in 1890-91, and was on his way there for a third time when he died at Las Béla in January 1892.

In 1894, the disputes between the Rinds of Mand and their Persian neighbours had become so acute as to necessitate an enquiry on the spot by British and Persian officers. Early in 1895, therefore, Captain Kemball, Political Agent in South-Eastern Baluchistán, met Zain-ul-Abdín, the deputy governor of Bampur, at Mand, and the disputes were for the most part settled.

The winter of 1895-96 saw Mir Mahmud Khán, the present ruling chief of Kalát (1905), with Captain Le Mesurier, Political Agent in Kalát, on tour in Makrán. No other Khán appears to have visited the country since the time of Nasír Khán I. The main features of this tour were the establishment of Diwán Udho Dáss in Kéch as the Khán's násim, the appointment of kárdárs in Panjgúr and Kolwa, and the location of detachments of the Kalát State troops in the country.

The Rising of 1898.

In 1898 a general rising occurred under Mír Baloch Khán and Mír Mehráb Khán, Naushérwani. Mír Mehráb Khán, Gichki, who was the prime mover in the revolt, made a treacherous attack on the Násim, Diwán Udho Dáss, on the morning of the 6th of January and took him prisoner, at the same time taking possession of the

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Turbat fort. The Názim was eventually released, and sought refuge at Kalátuk. Mehrab Khán next communicated with his brother, Mír Rustam Khán, who was in charge of the escort with a survey party working in the Kolwa hills under Captain Burn, and Rustam Khán with Mír Baloch Khán, Naushérwáni, made an attack on the camp which resulted in some men of the party being killed and a large quantity of Government property being lost. Small parties of malcontents moved in the direction of the sea coast looted Pasni, and destroyed much of the telegraph line between Pasni and Gwadar. A column was promptly despatched from Karáchi under Colonel Mayne consisting or 400 Infantry and two guns, and the rebels were defeated with heavy loss in an action at the defile of Gokprosh, south of Turbat, Mírs Baloch Khán and Mehráb Khán, Naushérwáni, being killed with about 150 others. The forts of Shahrak, Nág, Hor and Sehr were subsequently demolished.

There appeared to have been five causes of the outbreak. In the first place Mír Baloch Khán, Naushérwáni, who already held the surrounding country, had been granted the Bit fort in Buléda by the Khan of Kalat. It was occupied, however, by Mír Azim Khán, Bulédai, who held a sanad for its possession from the Khan and consequently refused to give it up, and the question was referred to the Agent to the Governor-General who decided it in favour of Mír Azim Khán, thus incensing Mír Baloch Khán against the násim who was considered responsible for the decision.* Secondly, Mehráb Khan, Gichki, had long cherished resentment at Sir Robert Sandeman's action in nominating to the chieftainship of the Kéch Gichkis, his elder brother, Sheh Umar, a man of much inferior capacity to himself. Innovations introduced by the nasim into the system of levying revenue, his personal unpopularity among a Muhammadan people, and the general unrest which had extended all down the North-Western frontier during the previous year, were other factors in the situation.

The rising led to arrangements for the introduction of a new form of administration, and at the end of the year Mir

^{*} On Mír Mehrulla Khán being installed as Násim, the Bit fort was occupied by the Násim's levies.

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Mehrulla Khán, Raisáni, was sent to Makrán as násim, where he has since continued to direct affairs (1905).

Frontier disputes.

In 1900, the peace of the country was disturbed by Sher Muhammad, Gichki, who set the násim's authority at defiance; but he was treacherously killed by Mír Mehráb Khán, Gichki, who had been deputed to treat with him. This led to the flight to Persia of Mír Muhammad Umar, Naushérwáni, the deceased's son-in-law, who, with the assistance of Persian subjects. committed a series of raids into Makrán, in one of which the number of his followers was more than 600, and the large village of Kuntdár in Dasht was attacked and pillaged. Captain Showers, the Political Agent in Kalát, proceeded to the country with an escort of 10 cavalry and 200 infantry and met the Sartip of Bampur at Dizzak and succeeded in making arrangements which sufficiently strengthened the position of the násim in case of a further attack by Muhammad Umar. It was subsequently settled that the British and Persian frontier authorities should co-operate in obtaining compensation from those responsible for the raids, and Major Showers, with an escort of infantry and guns, started for the Persian frontier in 1901. On arriving in the Kéch valley, it was found that the fort of Nodiz had been seized and garrisoned by Muhammad Ali, brother of Muhammad Umar, and a band of outlaws. The fort was being besieged by the násim with a force of Makrán sardárs and men numbering in all over a thousand. On the 20th of December 1901, the fort was stormed and captured. Showers then proceeded into Persian territory and a meeting took place with the Governor-General of Kirman at Magas. As a result of the operations and the meeting, the rebels were brought to account, while a useful agreement was arrived at for the disposal of border cases and the prohibition of the traffic in arms.

Visit of Lord Curzon to Makrán and appointment of Assistant Political Agent, Lord Curzon landed at Pasni at the end of 1903, the first Viceregal visit ever paid to Makrán, and in the following year an Assistant Political Agent was appointed with his headquarters in Panjgúr. He is the ex-officio Commandant of the Makrán Levy Corps which was organized in the same year to enforce the Khán of Kalát's authority in the country and maintain the peace of the border.

The antiquities of Makran have never been thoroughly explored, though some light has been thrown on them by Archeology. the researches of Colonel Holdich* and Major Mockler.

From the descriptions given by the Arab geographers. translated in Elliot's History of India, Sir Thomas Holdich has identified the ruins near Kalatuk as marking the position of the Kiz of Istákhri and Kirúsi of Idrísi, while Elliot's identification of Kanazbún with the modern Panigúr is confirmed both by Holdich and General Haig.† These papers also deal with the identification of many places in Persian Makrán, including those known to the Arabs as Darak, Bih, Bank, Kasrkand, Aspka and Tahalfahra.

> Tumuli or Dambs.

Mounds or dambs similar to those found in other parts of Baluchistan are scattered through the country, but a peculiarity of Makrán are little stonebuilt structures, which occur in groups on the hill-sides. Such hills are generally called Damba Koh by the people and are not infrequently attributed to Bahman (the Artaxerxes Longimanus). Excavations conducted by Major Mockler led to the discovery of buildings at Sutkagen Dor, a place about 40 miles to the north-west of Gwadar, which he considered to be the remains of temples or water works. † The houses were built with baked bricks or stone, and a large earthen pot was unearthed in one corner, while fragments of pottery, pieces of lime, and flint knives were common everywhere. At Jiwnri and at a place called Gati, 6 miles from Gwadar, Major Mockler discovered numerous little houses, oval or square in shape, and built of stone obtained from the surface of the hills. Better specimens, however, than those at Jiwnri were seen at Damba Koh south-east of Dashtián in Persian Makrán, and in them were found different kinds of earthenware vessels, clay and stone beads, grinding stones, stones for sharpening knives, a shell ring, pieces of rope pattern pottery, a lump of oxide of iron

[&]quot;Notes on Ancient and Mediæval Makran" by Colonel T.H. Holdich, Journal of the Royal Geographical Society, Vol. VII, No. 4. April 1896, page 397.

[†]Ancient and Mediæval Makrán, by Major-General M. R. Haig, Journal of the Royal Geographical Society, Vol. VII, No. 6, June 1896, page 670.

[&]quot;On Ruins in Makrán," by Major E. Mockler, Journal of the Royal Asiatic Society, Vol. IX, Part I, page 134.

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and a coin. The latter appeared to be of Greek or Bactrian origin.

In the eleven mounds opened at Jiwnri, vessels containing bones, scraps of iron, stones for sharpening knives, copper bracelets and shell ornaments were discovered and similar finds were made at Gati. The conclusion at which Major Mockler arrived was that the places had been used for purposes of interment, the bones of the deceased being placed occasionally in an earthen pot, but more generally on the floor of the damb. Pots containing food, weapons and sometimes a lamp, were the accompaniments of the corpse, which was apparently exposed previous to burial. In Sir Thomas Holdich's opinion the structures are possibly relics of the Dravidian races, which dispersed eastward on being ousted by the Semites from Chaldæa.

Bahmani damb near Türbat.

Ancient

The old mound, 2 miles west of Turbat, to which the name of Bahmani has been given by the people, from Bahman, the son of Asfandiar, the hero of the Shahnama, is apparently of the same type as that at Sutkagen Dor. It is covered with pottery, but shallow excavations made in 1903 failed to disclose anything of interest. Names from the Shahnama are again to be met with in the ancient kárézes in Kéch called Káúsi and Khusrawi after kings Káús and Kai Khusrau. The latter is especially interesting in the light of the evidence afforded by the Shahnama which mentions Kai Khusrau as effecting great improvements in the agricultural conditions of the country. The Khusrawi kárés is also known as Uzzai. Both are still running and their length is unknown, but while cleaning the bed of the Khusrawi kárés, the local cultivators state that they have followed the channel up to the bed of the Do-kurm torrent under which it passes, and found that it was roofed with slabs of flat stones supported on pillars which rested in their turn on an arch over the running Another kárés of interest is one at Kalátuk called Sád-o-bád, a name which is said to be a corruption of Saadábád. According to local accounts it was excavated by one of the Arab generals Saad-bin-Ali Wiqas in the time of the Caliph Omar.

Millstone at Sháhrak. Among other interesting relics of the past may be mentioned big, smooth flat stones with a square opening in the centre, four of which are to be found at Shahrak in Kech, and one arch at Kaisák near Turbat, Osháp, Asiábád in Tump and Those at Sháhrak are four in number and vary Násirábád. from 4'-9" to 6' in diameter and from 1' to 2'-2" in thickness. Locally they are said to have been used as millstones, but the question arises as to how power was obtained to turn such large wheels, and what the advantage of stones of such large size could have been. It is a remarkable fact that all the stones are to be found along the Kéch valley route from Persia to India.

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In Panigur are tombs which contain engravings similar to those at Guachig in Khárán, an account of which has been given in the gazetteer of that district. The tombs in Kolwa are also of interest, as they bear geometrical designs of different kinds engraved upon them.

Tombs.

A fine dam of good workmanship, but now in disrepair, is Reservoirs. to be seen in the hill overlooking the town of Gwadar.

In a graveyard near the mouth of the Gish Kaur, about Inscriptions. 8 miles to the south of Sámi, a tombstone has been discovered bearing a Persian inscription which may be translated as follows :-

"In the name of God the compassionate and merciful. Know, that at this time the king of Kéch is Sheh Mír Zehri Husain [engraved by Ali (not legible). Know that I am a mullá of the people of Islám].

"Know, and remember (not legible) that this threshold (ástána) has existed for many years before our time, so many that we cannot count them (not legible).

"Ye, that succeed us, set not your heart on the world and slacken not in your efforts in the worship of God and adopting the faith of Mehdi. Know, that we were 24 persons (who are buried here)."

The interest of the inscription lies in the local tradition that Sheh Zehri was one of the Bulédai rulers who ruled in Kéch during the seventeenth century.

Referring to Professor Rawlinson's derivation of the name POPULATION. Baluchistán from Belus or Baal, Sir Thomas Holdich remarks*:--"It can hardly be doubted, however, that Baal worshippers passed through Makrán, if they did not actually occupy the whole country in those days, when the pre-Semi-

Ethnographical history.

[&]quot; Notes on Ancient and Mediæval Makran." Journal of the Rayal Geographical Society, April 1896, Vol. VII, No. 4.

POPULATION. tic Dravidian races of Mesopotamia were gradually displaced by the Semite in the plains of Chaldaa. It seems most probable that these Dravidian races which now occupy the iungles and mountains of the Central Provinces of India. and who left representatives of their mighty family in the hills of Makran as they passed, must have migrated from the neighbourhood of Babylon to India. They have left their silent records in the shape of curious little stone-built structures on the Makrán hill-sides, which occur in groups or towns, and give the name of Damba Koh to the hills they occuby."

> The first historical reference to the ancient population of Makrán is to be found in Arrian, who divides the population into two distinct classes, that of the coast whom he names the Ichthyophagoi or fish-eaters, and the population of the interior the Oreitai and Gadrosoi or Gedrosoi of Gadrosia or Gedrosia. Strabo and several other authors have described the strange race of the Ichthyophagoi, who are undoubtedly identifiable with the present fishermen of the coast. Arrian writes: "These people are called Ichthyophagoi, because they live on fish. The tenderest of them they eat raw as soon as they draw them out of the water.* But they dry the larger and harder ones in the sun, and when they are thoroughly baked, they grind them down and make meal of them and loaves. Others bake cakes from this meal. Their cattle also live on dried fish, for the country is destitute of meadows and does not produce grass. * * The whole diet of these people consists of fish. Few of them sow any corn, for they use fish instead of bread. The most prosperous of them collect the bones of the whales cast up by the sea and use this instead of timber for their houses; the broad bones which they find they make into doors. The majority, who are poor, make their houses of the backbones of fishes." It has been suggested that the Oreitai are now represented by the Hots, whilst the Gadrosoi have been identified with the Gador. a few of whom now live in Las Béla and form part of the Jat or Jadgál population of that State. That the Jadgals or Jats were occupying Makran at a very early period is indicated by Ibn Haukal's remark (tenth century) that the inhabitants of

[•] A custom still prevalent in the case of prawns.—Ed.

Makrán were Zats (sic) Other races which are mentioned POPULATION. by the Arab chroniclers are the Korak and Méd, both of which are still to be found in Makrán, and it was in consequence of the piracies committed by these people that the expedition under Muhammad bin Kásim was organized by the Caliphs to conquer Sind. Arab settlements probably studded the coast of Makrán for many years after the seventh century and Arab blood has undoubtedly left its mark on the present population of the country.

The next glimpse which we catch of the ancient population of the country occurs at the end of the thirteenth century in Marco Polo* who says: "Some of the people are idolaters, but the most part are Saracens. They live by merchandise and industry, for they are professed traders and carry on much traffic by sea and land in all directions. Their food is rice and corn, flesh and milk, of which they have a great store."

But whatever may have been the ethnical elements which have amalgamated from time to time in forming the present population of Makrán, the majority are now known by the generic term, Baloch, and it is round the Baloch that the principal interest must centre at the present day. Of the origin of their name Major Mocklert writes: "With regard to the name Baloch I would also hazard a suggestion which, if it contains an element of truth, some better philologist than myself may perhaps uphold. It is this: whenever I have enquired of the Baloch the meaning of their name, they have invariably replied (as if the expression were proverbial) Baloc Badroc (Badrosh in some parts of the country). † Bad means evil, bad, ill, and roc or rosh means day (rús is the modern Persian pronunciation). Gad in Pehlevi or Zend (ancient Persian) is equal to and synonymous with bad in Balochi or more modern Persian; therefore Badroc or Badrosh or Bádros in Balochi is equivalent to Gadroc or Gadrosh or Gadros of the more ancient

[•] Travels of Marco Polo, translated by Colonel Sir Henry Yule, Vol. II, page 401.

^{† &}quot; Origin of the Baloch" by Colonel E. Mockler, Journal of the Asiatic Society of Bengal, Vol. LXIV, Part I, No. I, 1895.

[†] The system of transliteration from the Persian character adopted by Major Mockler is that prescribed by the Council for all publications of the Asiatic Society.

Population. Pehlevi or Zend, and to the Gadros-ii or Gedros-ii of the Greeks. Badroc, from the interchangeability of the liquids r and l, is equivalent to Badloc, out of which the d must naturally drop, leaving Baloc equivalent to the Gedros-ii. the derivation of Baloc from Gadroc in the manner suggested be considered philologically inadmissible, then we may suppose that the proverbial expression Baloc Badrosh was current in the time of the Greeks, only that it was pronounced in those days Baloc Gadrosh and that the Greeks wrote down the epithet for the name, which in such case would undoubtedly have been derived from Belus (or Balochis)."

> In the course of his article Major Mockler suggests that the Baloch were established in Makran more than a century before the commencement of the Muhammadan era, and that it is doubtful if the Rinds, who claim to be the true Baloch and to have come from Aleppo, ever came from that place at all. The Rinds, he thinks, may have been Arabs by descent, not indeed a people who emigrated from the town of Alaf-Haleb-Aleppo in Syria, but a people descended from a man named 'Alaf,' i.e., a tribe called 'Alafi,' Kahtanites of Oman. The subject of the origin of the Baloch has been further discussed in an article recently published by Mr. M. Longworth Dames,* who comes to the following conclusion:-

- (1) That the Baloch are an Iranian race, judging by their physical and mental characteristics, and that they should be classed with the Tájiks and other original races of the Iranian tableland.
- (2) That historically they may be traced first to the north of Persia, in the neighbourhood of the Caspian Sea, in the time of the later Sassanians.
- (3) That their settlement in Kirman probably did not take place till after the Muhammadan conquest, and that in Seistan not before the beginning of the tenth century.
- (4) That the movement into Seistan and Western Makran was probably caused by the Seljuk invasion (at the end of the eleventh century) and that the further advance eastwards was due to the pressure of Chingiz Khán's conquests.
- (5) That the final move into the Indus valley took place during the period of unrest and disruption of governments

[•] The Baloch Race, A Historical and Ethnological Sketch, by M. Longworth Dames.

which followed on Timur's conquests, and that it syn- POPULATION chronized with the invasions of India by Bábar and the Arghúns (in the fifteenth century).

It is unnecessary to enumerate at this stage the varied ethnical elements which compose the so-called Baloch population of Makrán. A detailed notice of them will be found in a latter part of this section. It will suffice to say that, as in many other parts of Baluchistán, it has been formed by the intermingling of many and strange types from the Dravidian and the Aryan; from the Arab, the Persian, the Jat, the Bráhui and the Rájput.

Density.

No regular census of Makrán has ever taken place, as, for political considerations, it was omitted from the scope of the census of 1901. In 1903, however, a rough house-to-house enumeration of the permanent population was made for the purposes of the Gazetteer, and an estimate was prepared of the number of families of nomads. The result showed the total number of houses in Makrán, including Rághai and Rakhshan, to be 15,717 houses or families. At the census of 1901, the incidence per house in Baluchistán was found to be 1.5. Actual enumeration of several households in Makrán indicated five persons per house as the average incidence and on this basis the total population of the country may be estimated at 78,585. A detailed statement of the principal census statistics will be found in Appendix I. The estimate of the total population thus arrived at in 1903 tallies, in an unexpected degree, with the estimate given by Ross in 1868,* the details of which are as follows :--

I	Divisio	on.				-	Estimated opulation.
Pasni	•••	•••				•••	1,000
Kulánch	•••	•••	•••	•••		***	2,000
Gwádar	•••	•••		•••	•••	•••	6,000
Jiwnri an	d Da	ısht	•••	***	•••		6,000
Kolwa	,,,			•••		•••	10,000
Panigúr				•••	***	•••	20,000
Kéch			•••	•••	••	***	10,000
Tump	•••			***	***	•••	10,000
Mand				• • • •	•••	•••	5,000
Other pa	arts (Zámur	án, B	uléda,	Bálgat	tar,	
etc.)	•••	•••	•••	•••	••	•••	12,000
					Total		82,000

^{*} Memorandum on Makrán, Bombay, 1868.

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POPULATION.

Calculated on the area of the country, the incidence per square mile amounts to rather less than three persons, a result which indicates the sparsely populated character of the country. Nor is the result surprising when we remember the vast unpopulated and uncultivated tracts which constitute such a conspicuous characteristic of the country.

Towns and villages.

The Baloch are wont to say with much pride: "The beauty of the night lies in the stars, and that of the forest in the Baloch," and this feeling is observable in the general tendency of the inhabitants to avoid living together in large communities. The only place which possesses any pretensions to be called a town is Gwádar, while the villages are not only few in number (125 or one in every 212 square miles) but small in size. Not more than fifteen villages possess more than 1,000 inhabitants. The largest and most important villages with their estimated population are given below:—

KÉCH. Turbat (Headquarters of the Makrán adminis-

I al Dat (I	TOMA	daar cor	3 OI U	o man	I WII AU	11111113	-
tration)	•••	***	•••	***	•••	1,650
Kaush Ka	alát	•••	•••	•••	•••	•••	1,510
Tump		***	•••		•••	•••	1,250
Nizrabád	•••	•••	•••	•••	•••	•••	1,250
Pulabád	٠.,	•••	***	•••	•••		1,500
Bal	***		***	- ***		•••	1,250
Kúhak	•••	•••	100		•••	•••	1,000
Pasni	•••		•••	***	•••	•••	1,489
Sámi	•••	•••	•••	•••	••• '		1,000
Bit	•••	***	•••	•••	***	•••	1,000
		r	ANJGÜ	īr.			
Isai (Hea	dqua	rters o	f the F	anjgú	r Niáb	at).	2,665
Tasp	•••	1	***	***	•••	•••	2,545
Khudábá	dán	***		•••	•••	•••	2,930
Garmkán	***	•••	***		•••	•••	1,590

Character of villages.

In former times the people were forced to live together for protection in or round the pestiferous little forts which have been so constantly the cause of trouble. Every petty chief and every headman possessed his fort to which those dependent on him hurried as soon as rumours of raiding or fighting had spread. Such of them as remain are built of mud, all more or less on a single principle of defence, square

... 1,005

...

Washbod ...

or elliptic in shape, with the walls thicker at the base than at PO PULATION the top, and from 30 to 40 feet in height. Bastions are located at each corner some 7 feet higher than the walls, and there is usually a square tower commanding the whole, situated in the centre of one of the side-walls. The casements are constructed under the walls and in the bastions, and steps lead to the roofs from the ground floor from which fire is directed downwards through loopholes or over the walls. In some cases traverses are also constructed inside. The water-supply is generally obtained from wells either in the interior square or situated in the bastions. The entrances not infrequently are in a zigzag, the side walls being loopholed. The mat-huts of the villagers are placed inside the walls or cluster outside round the base.

With the advent of the British, however, a change has come over the character of the villages, and now they consist of collections of mat-huts jumbled together without order, but divided by narrow lanes. Here and there is to be seen a more substantial residence made of sun-dried bricks, but still surrounded with the usual courtyard of matting. The larger villages generally consist of two or three hamlets separated from one another by short intervals, each of which is held by one or more of the different groups composing the population. At the date harvest the population of the permanent villages occupies temporary mat-huts under the trees or in the fields, and at this period all the permanent dwellings are deserted.

In addition to the 125 permanent villages of the country, many hamlets are to be found, the sites of which are shifted at periodical intervals. For instance, Dasht and Nigwar contain large dry crop areas which are divided into so many rés or mahál. Each such tract possesses a cluster of huts bearing the name of the rés, the site of which is changed within the limits of the tract every five or six years. The reason of this curious custom appears to lie in the desire of the cultivators to increase the fertility of the soil in those parts where the soil has been weakened by constant cropping, by the presence of human habitations.

Nomads move about in small bodies to different parts of the country as the necessity of finding water or pasturage for the flocks requires. POPULATION.

Growth of population.

Tradition asserts that at one time the Kéch valley was very numerously populated, and the extensive remains which are still to be seen give colour to this assertion. In the characteristic language of the country, the crow of the cock in Turbat in those days was repeated till it reached Tump, forty-four miles away,

It appears from the comparison which has already been made with the figures given by Ross that within the last forty years no increase of population has occurred, a fact which is doubtless due to the state of political chaos existing in the country. "Makrán is the home of war and strife; he who has the might possesses the wealth." There can be little doubt that many of the inferior races in Makrán, such as the Darzádas or Nakíbs and Méds are extremely prolific, and with the introduction of the present improved arrangements for the security of the country (1904), it is probable that the next census will indicate a considerable development in numbers.

In the succeeding paragraphs the small numerical strength of the dominant races such as the Gichkis, Naushérwanis and Bizanjaus will be apparent. This fact may be ascribed to the strict rules of endogamy prevailing among such groups and the great difficulty experienced, under ordinary circumstances, in obtaining a wife. Under the Gichki rules of endogamy the circle of their inter-marriage was formerly extremely limited. They appear to have been too proud to take wives from, or give their daughters to, members of even the most respectable Baloch tribes, such as the Rinds and Hots. A few instances did indeed occur in which they took wives from the Kauhdáis and Kalmatis, but they never gave their daughters in return. They boasted that they only inter-married with the Ahmadzais of Kalát, whence their appellation, khán-é-siád, the relations of the Khan. As a last resource, they turned to the Naushérwánis or the Mírwáris, but as the number of the leading families among these tribes is limited for reasons identical with those prevailing in the case of the Gichkis, daughters frequently remained without husbands and widow re-marriage seldom occurred. Recently the Gichkis have been forced into wider connections with the Bizanjaus of Nal, the Muhammad Hasnis of Jhalawan and the Jam of Las Béla,

but much of the opposition to marriage outside the family Population. still survives.

Another check on matrimony and a cause of the postponement of marriage till middle life among members of the dominant groups, lies in the high dower payable which often results in a man, even of some means, having to give nearly all he possesses. Under such circumstances polygamy is, except in rare cases, impossible and re-marriage nearly so. The rules of the group also render marriage outside the endogamous group difficult, for children by a Gichki out of a Baloch wife become tolag or jackal Gichkis, and as such are subject to a kind of social ostracism, and similarly Naushérwáni children from a Baloch mother are garrári or leprous while Mirwaris sink to jihandaris.

The tendency to nomadism throughout Makrán is not so pronounced as in some other parts of Baluchistán. nomadic population is large; it is estimated roughly to represent nearly half the population, but it is divided sharply into two classes. The first of these contains those groups who habitually wander over the country throughout the year, the chief of which are the Sangur, Bizanjau, Kilkaur Baloch and The other class moves in a much more limited Rakhsháni. circle, pasturing its flocks and herds of camels throughout the spring and summer in the hills, but returning to the neighbourhood of the permanent villages in the winter. Such are the nomadic sections of Kulánch, Dasht and Nigwar, consisting chiefly of Sardashtis, Bands, Puzh, Jadgáls, Dashtis and Lattis. Besides pasturing their flocks these people are engaged chiefly in the transport business to supplement their means of livelihood, which are otherwise scanty and precarious.

Internal periodic migration takes place at the date harvest when the whole of the country side flocks to Kéch and Panigur, the principal date-growing tracts. In the spring a system known as Bahár cháréni is in vogue, when many of the permanent inhabitants of the villages are seen wandering in the hills for the sake of the fresh pasture for their flocks and herds and change of air and scene for themselves.

As Makran is situated on the line connecting the West with Immigration. the East, it is not surprising to find much historical evidence

Migration. Nomads.

POPULATION. of the movement of population both from it and to it. All the early tradition of the Eastern Baloch, who now occupy Sind, Kachhi and the Marri and Bugti hills in Baluchistán and parts of the Punjab pivot round places in Makrán or Persian Baluchistán, and the Rinds of Kachhi and of Mand in Makrán claim blood affinity. On the other hand, while some of the Jadgál groups in Makrán have occupied their present position for centuries, others are known to have made their way westward from Sind and Las Béla in more recent times. Thus the Korak and Kénagizai trace their origin from that State. Immigration of permanent settlers from the Jhalawan country, and the coast of the Persian Gulf, is exemplified by the case of the Kashanis of Panigur. who trace their connection with the Shahwani Brahuis of Iskalku near Kalát, while Méngals are to be found from Wad and Bizanjaus from Nál. The Gurgnári Bráhuis in Gwárgo came from Gidar in the Jhalawan country and have changed their language from Bráhui to Baluchi within living memory. The Barr from Bahrein are an instance of immigration from the Gulf.

> All these immigrants have now become permanent settlers, and it is noticeable that the tendency of their migrations leads them towards the fine cultivable lands of Kéch rather than to other parts of the country. Signs exist that a movement from Persian Baluchistán is in progress, heralded by the arrival of 200 families of Lattis in Dasht during 1903. Owing to the misrule and exactions of petty chiefs which go on across the frontier, the movement seems likely to extend.

> Periodic immigration is confined to the season of the date-harvest, when Dizzak, Sarbáz and Báho in Persian Baluchistán and also Las Béla send large contingents to Kéch and Panjgúr, and to the visits of the Lagor and Kosag tribes from Báho who visit Tump and Kéch proper with their buffaloes in the early spring and remain in the country sometimes for a whole year selling milk and butter. The Hindus of the coast reside only temporarily in the country for purposes of trade. They come chiefly from Sind. The Lotias (Khojas) at Gwadar, who originally migrated from Cutch, have taken up permanent residence.

Emigration is, for the most part, temporary and usually POPULATION. takes place eastwards to India. In former times large caravans of emigrants made their way by land through Las Bela to seek service chiefly in the ranks of the forces maintained by the Native States of Rájputána. Nowadays the traffic has been diverted to the coasting steamers. The emigrants are chiefly Kéch Baloch and Darzádas, who are either nomads or possess little lands. Some of the former have risen to high rank in the Native States with which they have obtained service; the latter supply the rank and file. A few Darzádas and Nakíbs and many of the Kolwa Baloch make their way, in times of scarcity or absence of rainfall, to Karáchi, where they work as day labourers. The majority of the so-called Makránis, however, who are to be found working at Karáchi in such large numbers come from Dizzak. Sarbáz and other localities in Persian Baluchistán. A good many are employed in the mines which are worked by the North-Western Railway at Khost in the Sibi District. Baloch, who owns land and water, will never emigrate unless forced to do so. The following statement shows the number of persons censused as Makránis in India in 1901:-

Locality.			No. of Makránis.	Males.	Females	
Baluchistán			2,282	1,172	1,110	
Rájputána	•••		975	564	411	
Bombay	•••		3,837	2,046	1,791	
	Total		7,094	3,782	3,312	

No emigration appears to take place towards Persia.

No vital or age statistics are available, but it is probable that, as in other parts of Baluchistan, longevity is infrequent owing to mal-nutrition and lack of proper clothing and the absence of any systematic medical treatment. Infirmities are limited in number, and during fourteen months' residence in the country, the Gazetteer party observed only two persons who were blind and lunatic. For a country in which halfcured fish forms one of the staple articles of diet of the

Vital statistics, infirmities and infant mortality.

POPULATION. people, the absence of lepers is remarkable. Night-blindness is common and is attributed to the diet of fish and dates on which many of the people live. The rate of infant mortality is probably very high, the period at which most children die being that of cutting the teeth, when fever occurs. Enquiries made in 1903 among men of means showed that in one case six had died out of fifteen: in another family all thirteen children had died while in a third case three had died out of twelve. The mortality among the poorer classes is probably even higher.

Comparative number of the sexes. and Civil Condition.

At the general census of Baluchistán in 1901 the number of males was found to exceed the number of females, but there is reason to believe that such is not the case in Makrán and this is the general impression among the people of the country. At a census of Pasni made on the 13th of March 1903 by the Gazetteer working party, the results showed 747 females against 742 males, and independent enumerations of groups of Rais Baloch at Turbat and of Meds at Pasni indicated an excess of women in each case. It would of course be dangerous to draw final conclusions from such isolated figures, but when considered in conjunction with the ideas of the people themselves on the subject, the conclusion may fairly be drawn that the proportion of women to men will be found at the next census to be higher in Makran than elsewhere except in Khárán. Every man in Makrán marries as soon as he possibly can, but the payment of dower (labb) frequently delays marriage till middle age. This is specially the case with the poorer nomadic classes. Polygamy is Cohabitation with concubines is considered uncommon. derogatory, and the children of such unions are excluded from inheritance.

Marriage customs.

Marriage takes place after both parties have attained puberty. Among the well-to-do the bridegroom is generally about twenty, while among the poorer classes he is generally rather older. The bride is usually about four years younger. In very rare cases infant betrothals take place, generally among very near relations. The wealthy are the only persons who can afford to pay the dower for a second wife.

When a man's parents wish him to marry, they make their selection, and if the preliminary overtures are well

received, they then despatch an elder Saiad or near relation, POPULATION. such as an uncle or elder brother to the father of the girl to arrange the betrothal (sámati). The future bridegroom's wishes are either not consulted at all, or, if consulted, are entirely subordinated to his parents' view of the matter. The bride has nothing to say in the matter. If the father of the bride consents to the proposed union, the amount of dower (labb) is fixed and also the date of the wedding. This ceremony, which is known as chakkána, is considered binding but not so as to render retreat entirely impossible. considered a want of good breeding on the man's part to retreat without a plausible excuse, and any one who does so is regarded with contempt. In the case of the women, the betrothal is considered binding, except under special circumstances, such as adultery on her part or strong suspicion of it. In such a case, the dower or at any rate, part of it such as the ornaments, is returned and the other expenses incurred by the bridegroom are recouped.

The payment of bride-price in vogue in other parts of Baluchistán does not extend to Makrán, but every tribe possesses a recognised amount of dower (labb) which consists of three things, viz., property called mirás; ornaments known as sohr; and servile dependants (bandag). dower becomes the sole property of the bride and is generally "prompt" but part of it can also be deferred. the dower, the sámat, or bridegroom elect, must present dresses (pardách) to the bride and sheep and grain to her father for the entertainment of the wedding guests.

All these preliminaries having been settled, the marriage (súr) is solemnized on the date fixed in accordance with the usual Muhammadan rites, and the bridegroom lives for some days, months or even years with the parents of the bride (dishtar).

The word labb, used in Bráhui or eastern Baluchi, means bride-price, but it does not convey this meaning in Makrán. In other parts of Baluchistan the money paid as bride-price is given in cash and is appropriated by the father or other guardian of the bride. In Makran, however, the labb or jahás is paid in landed property, ornaments or servile dependants and forms the personal property of the bride in which she has every right of disposal.

Dower.

POPULATION.

As already mentioned, different rates of dower exist among the various groups. They constitute the recognised standard rates fixed by ancient custom, but they are, by no means binding, since marriage is a matter of choice on both sides. Sometimes higher and sometimes lower rates are settled. Such cases, however, constitute departures from established custom. In recent times the rate of dower has exhibited a tendency to increase in the case of the wealthy and to decrease in the case of the poor.

To indicate the general principles on which dower is settled, it will be useful to give the general standard of dower amongst the Gichkis of Kéch and Panigúr. The terms are sufficiently remarkable. Among the Gichkis of Kéch the property given consists of two hangams of land and water with date trees under one of the larger kárézes. The sohr takes the form of ornaments to the value of 100 sohr or Rs. 500 in cash. The present value of a gold sohr (1904) is Rs. 7-8, but for purposes of dower and blood-money it is reckoned at its ancient value of Rs. 5. The bandag consists of twelve servile dependants, six male and six female. The pardách or dresses consist of 40 sohr or Rs. 200 in cash, or the following articles of apparel: twelve dresses, six silk and six cotton; twelve articles of bedding, mattresses, coverlets, etc., twelve mosquito curtains; a cotton dress each for the nurse and governess, and hinni (Lawsonia inermis) scented oils and such like. As the total cost of these articles generally exceeds Rs. 200, the bridegroom usually compounds by paying the cash. Finally comes the pas-o-dán which is composed of 60 standard maunds of grain and sixty sheep.

The Gichkis of Panjgúr pay thirty bandag instead of mirás. The bandag consists of servile dependants, fifteen male and fifteen female, or instead of each servile dependant ten date trees or a plot of land which takes 25 seers of seed (tuhm-já). To this are added 30 sohr in cash or ornaments; three silk dresses and three cotton as pardách and such pas-o-dán as may be mutually agreed upon. These rates obtain for endogamous marriages, but if a Panjgúr Gichki gives his daughter to a Naushérwáni, Mirwári or Muhammad Hasni, he demands forty servile dependants and 40 sohr.

Bow price.

Another curious payment which may be mentioned is called káman-bahá or bow-price. It consists of a present

made by the bridegroom to the brother of the bride or to POPULATION. her first cousin which generally takes the form of a horse, rifle, sword or some other weapon. Cash payments are also substituted nowadays, the Gichkis giving from Rs. 600 to Rs. 1,000 and the better classes of Baloch from Rs. 300 to Rs. 500. A herdsman's bow-price is generally a camel or three or four sheep. The idea prevails throughout western Baluchistán that the bestowal of a daughter in marriage is humiliating in itself and, so far as can be gathered, this feeling appears to afford the basis for this curious custom of bow-price, the payment of kamán-bahá being a kind of compensation for the gift of a bride and intended to symbolise the laying down of arms by the bridegroom before the bride's family and the recognition of their social superiority.

The Rinds of Mand who are the fire-eaters of Makran and very punctilious about points of honour lay much stress on the demand for kamán-bahá, and the notion extends to other primitive Baloch of the valleys. The Baloch of Kéch proper, however, are inclined to hold it in contempt.

With the object of obtaining the large amount of labb which has to be paid for his bride it is usual for a Baloch bridegroom to go himself or to send his father or uncle to his fellow tribesmen, relations and friends and even to strangers to collect subscriptions. This custom is known as bijjar and every one, who is asked, gives according to his means; one presents a sheep or two, another a camel, a third some weapon and a fourth cash. It is not considered respectable to refuse. The chiefs of the country are now inclined to demand bijjár as a right and make the round of their people realizing as much as they can but never less than Rs. 5 from an ordinary family and more from those that are better off.

The portion of the dower which consists of moveable property, such as servile dependants and ornaments, is generally "prompt" but the land and water is "deferred." The bride possesses powers of alienation and is liable for the payment of her own debts. Where the marriage has not been happy, it frequently happens that the wife takes over the entire management of her "prompt" dower property and calls on the husband to pay the portion which has been "deferred." If the woman pre-deceases her husband, the

Bijjár.

Rights of the wife in her dower.

POPULATION. Muhammadan law of inheritance is followed, half of the dower reverting to the husband, and half going to any children there may be from that wife, or if there be no children, to the lineal heir on the father's side.

Property acquired by the bride from her father.

A father is expected to make his daughter presents proportionate to his means, such as cooking utensils, household furniture, and a few ornaments, and in these things the wife also retains full proprietary rights. Occasionally also separation of property takes place in the father's life-time and the daughter receives her proportion.

Divorce.

Divorce is commonly practised among the Baloch and lower classes among whom it is given on trivial grounds, but seldom in the case of the dominant races. Both husband and wife possess the right to divorce. If the woman desires divorce she loses her dower; if the husband divorces her he has to pay the "deferred" amount. It is common for wives to apply for divorce, and divorce under any circumstances, except on account of indecency and adultery, does not reflect discredit on the woman nor lower her social To take a divorcée to wife is not considered dis-She is treated as a widow and receives the widow-rate of dower which is half the ordinary rate payable for a virgin.

A wife divorced for proved adultery has no right to her "deferred" dower, but the woman's nearest relations generally force the adulterer to pay the amount of dower promised by the late husband and also compensation for loss of respect (mayár).

Penalties for adultery.

Immorality among the servile dependants, Loris, Darzadas, and poorer Baloch, is common, but less frequent and less scandalously open among the better classes. Theoretically, death is the punishment of a faithless wife caught flagrante delicto, but in practice, this seldom occurs, and an injured husband is ready to salve his conscience with compensation in money from the adulterer and to take the woman back. If only suspicion has been aroused, the husband usually informs the father or the brother of the woman and it is incumbent on them to kill her. When a woman has been killed and the adulterer escapes and the case comes before the authorities it is usual for him to be ordered to pay a fine (malám) and to be mulcted in the

amount of dower together with payment of compensation POPULATION. for loss of honour (mayar) to the father or brother of the If the woman is only divorced, the adulterer woman killed. is obliged to marry her and to pay a fine to the State and the dower to the injured husband, while in place of mayar he has to find an amount of dower equal to that received from the first husband. If the adulterer is unable to pay, it is incumbent on the father, brother or husband to avenge the dishonour by his blood and for the woman to be killed by the brother. This system gave rise in the past to endless retaliation and constant blood-feuds among the better classes, but the more common method of settlement among the majority of people was to apply to some sardár to effect an amicable arrangement.

The status of women and rights

From what has already been said it will be apparent that woman in Makrán occupies a much stronger position than her sisters in other parts of Baluchistan and that her status to property. is even better than it would be in India proper. entire control over the property acquired from her husband as dower and as the Muhammadan law of inheritance is followed, she may expect in course of time to inherit a portion of her parents' property and will be entitled to a share in her husband's property if he pre-deceases her. She is the "better-half," therefore, from every point of view, and the husband, having frequently given nearly all he possessed in dower, takes a secondary place in the household and in a sense is dependent on the charity of his wife. not on good terms with his wife many a husband would find it difficult to maintain himself and his followers and it behoves him, therefore, to submit to his wife's domination. Nor, if he disagrees with her, is he usually in a position to find another wife owing to the large amount of dower demanded. As indicating the pre-eminent position occupied by woman, it may be mentioned that it is customary to attribute the qualities of a son or daughter to the mother and not Thus, when lauding some sardár's liberato the father. lity, Makránis will say: "And no wonder; how able a woman was his mother!" It seems reasonable to suppose that the high place thus assigned to woman in Makran had its origin in the Arab conquest and occupation of the country between the seventh and tenth centuries.

POPULATION.

Inheritance by widows.

In Kéch proper, the full rights of inheritance in her husband's property recognised by Muhammadan law are secured to a widow; and a rich widow, therefore, is an object of earnest search among the gentry of Turbat. Elsewhere, the custom of bájáj exists in accordance with which a widow, if desirous of remarriage, must marry the brother or other collateral heir of her deceased husband. If she marries an outsider she has to abandon the dower given by the first husband. If she does not re-marry she remains in possession of her dower and on her death, her heirs are, in default of issue, her relations on the father's side; her husband's heirs receive nothing. Great stress is laid on the custom of bdjdi by the people of Panjgur, but in 1903 they signed a document on the advice of the ndsim abandoning the custom. In Tump, Mand, Kolwa, Kulánch and Dasht it is not generally considered respectable to prefer a claim for bájái but instances occasionally occur.

Inheritance.

All questions of inheritance are, as already mentioned, regulated by Muhammadan law and the Makránis, unlike the Afgháns and Bráhuis, make no distinction in the case of women who have full rights of alienation in the case of property acquired by inheritance. The only deviation from ordinary Muhammadan law is to be found among the Rinds of Mand who possess a remarkable custom of allowing a daughter an equal share with a son. The power of the son to maintain himself by robbery, theft, cattle-lifting and such acts, privileges denied to a weak woman, is the alleged reason for the custom. Among the Méds, the daughters are given no actual share in the boats and fishing tackle but are paid the equivalent in cash.

Language. Jadgáli. The languages spoken are three in number: Baluchi, Jadgáli and Lori-Chíni. The last two may be passed over with few words. Jadgáli is spoken by the few Jadgáls of Kulánch and is practically identical with Lási, the language of Las Béla, and an offshoot of Sindi. Its survival after so many generations, surrounded as it has been with Baluchi, is interesting as indicating the endogamous propensities of the Jadgáls like other people in Makrán.

Lori-chini.

Lori-Chini, the language of the Loris, said to be derived from the Sindi word Chaéni, "said" or "invented", is not a separate tongue, but is a curious secret artificial jargon

invented by the Loris and spoken before strangers. The Population. dialects of Lori-Chini in vogue among different sections of Loris, differ in various localities, but the words are generally inverted forms of Baluchi and sometimes also of Urdu, Sindi and Punjábi. A few instances may be quoted by way of example:—

One.	$\mathbf{E}\mathbf{k}$	The Urdu numeral.
Three	Hés	Inverted form of Ba-
		luchi, <i>séh</i> .
Four	Rách	do. of <i>chár</i> .
Five	Champ	do. of pánch.
Ear	Shog	do. of gosh.
Hair	Dúm	do. of <i>múd</i> .
Head	Ras	do. sar.
Belly	Tép	do. of Urdu <i>pét</i> .
Brother	Dirábad	do. of Persian brádar.
Flesh	Shogd	do. of Baluchi gosht.

Among words peculiar to the jargon may be mentioned tibbar (father), somb (nose), and goma (a rupee).

Baluchi is the language most extensively spoken and has been studied by European scholars to whom it is known as Western Baluchi or Makráni to distinguish it from the dialect spoken in eastern Baluchistán and the Punjáb and known as Eastern Baluchi. It is presumably to Baluchi that Ibn Haukal (tenth century) refers when he writes: "In Makrán they use Persian and Makránic", a statement which is corroborated later by Al-Idrisi (eleventh century) who says: "The people of Makrán speak Persian and a dialect peculiar to the Province." Marco Polo at the end of the thirteenth century also notices the peculiar language spoken in Makrán.

The Europeans who have studied the Baluchi of Makrán are Mr. E. Pierce and Major Mockler. In his description* of the Makráni-Baluchi dialect published in 1874, the former has included in his grammar a number of sentences and a short vocabulary. The following description of the language and its speakers is given:— "The Mekránee-Bélochee is the dialect spoken by the people living in the eastern and southern parts of Baloochistán. Its limits on the sea coast

Western Baluchi o r Makráni.

Journal of the Bombay Branch of the Royal Asiatic Society, No. XXXI, Vol. XI, 1875.

POPULATION. are the Malan mountains on the east, and a line drawn about fifty miles west of Charbar (Chahbar) on the west. Inland, it is spoken generally over the large provinces of Kej, Kulanch and Kolwa, with the adjacent districts.

"The dialect spoken over the whole of this tract varies very slightly, and the people of any one district are intelligible to people of the others. There are, however, innumerable small variations in the words used in every district, and people are often unacquainted with words in common use amongst people living forty or fifty miles distant.

"In the districts of Báho and Dushtyári, north-west of Gwádar, the country is inhabited by Judgáls (Sindee tribes settled in Makrán), and the language of these districts is consequently a dialect of Sindee. The dialect spoken by the Máyds (Méd—a fisherman), inhabiting the coast villages of Ormára, Pusnee and Gwádar, differs slightly from that spoken by the people living in the jungle.

"The dialect which I have more particularly chosen to describe is that spoken by the country people living east of Gwadar, as in their dialect the words adopted from the Persian are used without many of the corruptions common to the people about Gwadar and to the westward. In the vocabularies the pronunciation used east of Gwadar will be found in the first place. The western forms, where differing, are given after the eastern form.

"From about fifty miles west of Charbar (Cháhbár), a different dialect commences to be spoken. This is almost unintelligible to the people living to the east, and appears to resemble Persian much more closely than the Gwádar dialect. Persian words are largely introduced without alteration, but the construction still retains the Bélóchee character. In this district Persian commences to be to a certain extent current.

"The Mekranee-Belochee appears to be a dialect of Persian mixed up with a great many words of Indian origin, which have probably been introduced by the Judgals. It appears to have little connection with the modern Persian, many of the words derived from the latter language being words now obsolete or very rarely heard. One of the most notable features in Beloochee is the retention of the "majhuil"

sounds of and o, which have been entirely discarded POPULATION. by the modern Persians.

"The words of Indian origin are principally nouns, but a few of the verbs in very common use are of undoubtedly Indian origin, as *ladaga* to load, *lagaga* to strike, and *cháraga* to look. Amongst the adverbs also are *hantn* now, *ida* here, *uda* there and *kadin* when.

"The principal changes undergone by Persian words in their introduction into Béloochee are :--

- I. Substitution of g for the silent h.
- II. The softening of all throat sounds as $kh(\dot{z})$ into k or $h, gh(\dot{z})$ into g.
- III. The alteration of the sound of the long alif from the sound of a in fall to that of a in arch.
- IV. The substitution of g or gw for b as gwát for bád, gesh for besh, gwází for bází, gwán (gwánk) for báng.
- V. Substitution of w for khw (غه) as wáb for khwáb, wat for khud, wánaga for khwándan, waraga for khúrdan.
- VI. Substitution of i for o or u as dir for dur, bita for buda, etc. These words may, however, generally be pronounced either with o, u or t. The substitution of t for o, or u is peculiar to the western part of Mekran.
- VII. A general disposition may be noticed to end all words in k or g."

Major Mockler* thus describes the Baluchi spoken in Makran: "It will hardly appear impertinent if we now ask whether, the language being the same throughout, any marked peculiarities, in pronunciation, idiom, or in the use of particular words, are met with in different parts of the country? To what group, family or sub-division of languages does this one belong? and is it the original language of the country? also in what parts is it most purely spoken at the present time? To what race or races do the people who now speak it belong? from whence did those or foreign extraction (if any) come? and when?

"To these questions we may answer, that the pronunciation varies slightly in the different districts of Makrán, (the Southern and Western portion of Baloochistán), and certain words, or different forms of the same words, are found more or less restricted to certain portions of the country,

^{*}Introduction to a Grammar of the Baloochee Language, London 1877.

POPULATION. which peculiarities, together with syntactical or idiomatic difference (if the handbooks which have appeared on the subject can be trusted), are so marked in the dialects of the tribes inhabiting the Sulaimán range, as to render them little better than a patois of Beloochee.

> "As regards the so-called Beloochee language itself, we may say that it is an Aryan tongue of the Iranian group*, and appears to be a sister language to the Pehlavee, one which at any rate branched off from the old Persian about the same time as the Pehlaveet did, and may, I think, be fairly considered an offshoot from the old Persian, developed in Makran, and to this extent an original language. How far it has been influenced in its infancy, or later, by the presence or influx into the country of the people speaking other tongues, is a question it is unnecessary to discuss here, as it in no way affects the question of its Iranian origin. *** The language of Makrán is both in pronunciation, grammatical construction and idiom, an unmistakable Iranian tongue. and philologically homogeneous in its parts; while that spoken by the tribes of the Sulaiman range is as unmistakably the same language, but imperfectly acquired by them, during their passage through Makran (they were between twelve and fifteen years in the country), and pronounced by them as Arabs or Syrians might be expected to pronounce it. with the introduction of Semitic gutturals and other sounds foreign to an Iranian tongue. We find also in the latter dialect, as might be expected, the addition of many Hindostanee words not used in Makrán, and a syntax of grammatical construction (or the want of one) somewhat startling at times. † As regards the precise locality in which the language is now most purely spoken, I cannot

[•] Dr. Grierson classes Baluchi as belonging to the Iranian branch of the Arvan sub-family of the Indo-European family.- Ed.

⁺ I am indebted to Dr. Andreas, Professor of Philology in the University of Kiel, a Pehlavee Scholar, and an authority on this group of languages especially, for kindly pointing out this relationship between the Balochi and the Pehlavee. -E. M.

[‡] All my remarks on the dialects of the hill-tribes of the Western Frontier are based on what I gather from the contents of the Balochi Manuals of Messrs. C. E. Gladstone, Bengal Civil Service. and R. I. Bruce, Assistant Commissioner of Rajanpur. I have no personal acquaintance with these dialects. -E. M.

venture to speak positively; but the maximum of purity POPULATION. would naturally be looked for in a somewhat central position in the country and one which has not been much subjected to foreign influences, and is, I think, so found in the speech of the more primitive inhabitants of the mountainous tracts both North and South of Kéj district."

It may be noted that the difference between Eastern and Western Baluchi is not so great as to render one dialect unintelligible to speakers of the other. The Persian substratum in Western Baluchi renders it soft, fluent and musical, and better adapted, therefore, to the expression of tender feelings and deeds of chivalry than its eastern sister. In Eastern Baluchi the admixture of modern Sindi and Punjabi words imparts a rougher intonation and greater difficulty of pronunciation.

The differences in the local dialects of Makrani Baluchi mentioned by Mockler appear to be only conspicuous in the case of the Baluchi spoken along the coast and at Mand as distinguished from that spoken in the interior. The former dialect largely resembles that spoken in Eastern Baluchistán and the Puniab, except for the absence of Sindi and Puniabi words and the substitution of "ph" for the "p" of Eastern Baluchi, e.g., phdg for pdg. The distinguishing feature between the Baluchi of the interior and that of the coast and Mand is the use of the Wau Marúf for Ydé Marúf. Thus the inhabitants of Kéch say busúr "take," while on the coast and Mand it is bisir. It would appear that the more primitive language is spoken at Mand and along the coast, and in this connection it is interesting to note that popular tradition indicates the Rinds of Mand as the first Baloch settlers in Makrán, and that they threw off offshoots along the coast such as the Kalmatis.

A considerable body of literature exists in Western Baluchi and many of the leading men keep books, known as daftar, in which their favourite ballads are recorded in the Persian character. Among the more famous of these poems may be mentioned that recounting the Rind migration; two poems giving details of the various rulers of Kéch-Makrán, the second of which is by Allo, son of Zarín, Kosag; a ballad by Ghulám Ali describing Malik Dínár Gichki's fight with Taki Khán, Nádir Sháh's general; another by

Literature and correspondence.

POPULATION. Hothman Kalmati describing the fight between Hammalé-Jihand and the Portuguese; and lastly a poem describing a fight at Lashkarán Kaur in Panjgúr between Mír Mohim Khán, Naushérwáni, and Mir Gohrám, Gichki, of Panigur on one side and the brothers, Lal Khan and Zangi, Bráhuis of Nushki, on the other. Correspondence is carried on by all classes, except Hindu baniás, in Persian.

Races. tribes and groups.

To the outside world an inhabitant of Makran will state his nationality as Makrani; at home he is known as a Baloch. At the same time a sharp local distinction is drawn between the dominant classes, who will be presently described, and the middle or cultivating class whom the former describe as Baloch with a certain feeling of contempt. The Baloch are again divided into smaller groups or units such as Kauhdáis, Jadgáls, Mulláis, etc.

Before entering on a detailed description of each important group, attention must be drawn to the entire absence in Makrán of the organized political or ethnic units, known as tribes, which are to be found in other parts of Baluchistán.* Nearly the whole of the population is composed of separate groups living apart from and independent of one another. In a few cases, as with the Rinds of Mand and the Hots, the larger units contain small eponymous groups, but as a rule the connection between the lesser groups, and the larger units is buried in obscurity. As soon, too, as fission takes place within the larger group or tribe, the separated unit breaks all connection with it and no longer participates in its good and ill. An instance may be quoted in the Hots of Tump who deny all connection with the Rinds of Mand, while the Hots of Kaláto in Dasht have nothing to say to the Hots of Gushtang near Turbat nor to the Hots of Tump. Again, although the Kauhdais and the Kalmatis are said to be Rinds by origin, they are independent of the Rinds and of each other. The same is the case with the Rais of Turbat who do not consider the Rais of Kalátuk, Tump, Mand and of Panigúr as their equals, while the latter again in their turn despise the Rais of Jiwnri and other places who have become fishermen.

^{*} For a description of the two types of tribes found in Baluchistán, see Census of India, 1901, Vol. V, Chapter VIII.

Nomadism is the chief determining cause of fission, but, as POPULATION, the tribal organisation common to other parts of the country is non-existent, there are not the same inducements to remain Fission. in the tribe as exist elsewhere. Hence, too, when a family or group takes up a new abode it retains its identity. dispersion of families is generally due to disagreements between the mother-in-law and daughter-in-law. Makrán husband, too, has everything to gain by subservience to the caprices of his wife, whence the proverb: "Seek the husband in the country of his wife. And the cow in the house of the original owner."

Reference will presently be made to the intensely democratic feeling prevailing among the Rinds, and this feeling may be said to extend to the whole of Makrán. Small groups and units are to be found living in each locality, whose notions of self-importance have prevented them from combining and forming the semi-artificial tribal organisation which is common to other parts of Baluchistan. Hence, too, the frequent use of local names, coupled with the general appellation of Baloch; Kallagi-Baloch, Sami-Baloch, Koh-Baloch, Kolwái, Dashti, &c., and the loss of the ethnic denomination. To this also may be ascribed the great power which the dominant races have always exercised in Makrán. The modern history of Makran is the history of the dominant classes whose influence and prestige, and, sometimes, tyranny have drawn the disorganized and scattered people to their banners, and whose power has, until recent times, been almost without limit.

> Main divisions.

Three main divisions of the population are locally recognized; the dominant classes called hákim; the middle classes composed of heterogeneous units long since amalgamated into the single body known as Baloch; and the inferior orders of society consisting of menials, village servants, minstrels, artisans and servile dependants who are called hismatgár. The traders of the country consist of Hindus and Lotias (Khojas), most of whom have their homes in India. A few, however, have permanently settled at Gwadar.

The dominant classes consist of the Gichkis, Naushérwánis, Mírwáris and Bízanjaus. These classes constitute the landowning gentry of Makran. They hold large revenue-free grants, and previous to the British occupation of Baluchistán,

POPULATION. occupied positions little inferior in power to that of the feudal barons of ancient England. By common usage no blood compensation could be claimed from them for the death of a Baloch, and cases of their taking the life of the lower classes without cause were not infrequent. They murdered, plundered or insulted without let or hindrance. The people living under the control of the leading men were bound to follow them on a call to arms whence the influence for good or evil which they acquired and which has from time to time rendered them so troublesome to the administration. It may be noted that all the groups which form the dominant classes are outsiders, who found the political conditions of the country such as to enable them easily to acquire supremacy among the indigenous population. Such a fact speaks volumes for the want of spirit character in the Makráni.

The Gichkis.

The Gichkis who, in spite of their small numbers, have hitherto been the most powerful class in Makrán are divided into two distinct divisions, the Kéch or Dínárzai Gichkis and the Panjgúr or Isázai Gichkis. With the former must also be included the Bulédai Mírs and with the latter the Tolag The latter are not regarded as pure Gichkis, but Gichkis. are the descendants of Gichki fathers and Baloch mothers as explained in the section on Population. The distribution of the Gichkis is given in the subjoined statement :-

Locality.	Group.	Residence.	No. of Families.	Remarks.
Kéch	Dínárzai Gichki ** Isázaí Gichki	Turbat Kalátuk Násirábád	3 3 3 8 8	With the exception of the Isazais of Shahrak and Sámi, these
Tump	Dínárzai Gichki	Tump and Pullábád	. 9	are known as Kéch Gichkis.
Buléda	Bulédai Mírs	Chib (Buléda)	33	The Bulédai Mirs are descended from Kéch Gich-
Panjgúr .	Isázai Gichki	Isái Sordo		ki fathers and Baloch mothers. These Isazais are the elder branch
Panigúr	" Tolag Gichki		5	of the true Gichki,
renieur	** ** **	Tasp Khudábádán Garmkán Sari Kaurán	. 8	
•	,	Washbod	44	

Assuming that the number of persons in a family is five, the POPULATION. pure Gichkis number 190 and the bastard Gichkis 320, a total of 510 souls. Their name is derived from the Gichk valley in Panigur in which their ancestors, who were undoubtedly immigrants from India, first settled on their arrival. The place from which these ancestors came is variously stated as Jaipúr, Jodhpúr Marwar, Jamnagar and Lahore, and has not yet been identified. The period of their arrival, too, is doubtful. Ross states that it took place early in the seventeenth century, but on the other hand the number of generations from their founder, Már Singh, to the present time, is stated to have been either seventeen or twenty which would place their arrival in the country sometime about the fifteenth century.* At all events they had risen to such power and influence in 1740 that an expedition had to be sent against them by Nádir Sháh. They are said to have been converted to Islam three generations after their arrival. but became Zikris on the rise of that sect.

The Panjgur Gichkis appear to have gradually acquired power and influence until early in the eighteenth century when Mullá Murád, the brother of Mír Alláhdád, the tenth sardár of Panjgur, made his way to Kéch and ousted the Bulédais from power. Mullá Murád became the religious head of the Zikris, and he and his son, Malik Dínár, appear not only to have been active propagandists, but to have organised the sect on the basis of mutual co-operation and of the possession of all property in common. The events

^{*} Since the above was written the following story about the origin of the Gichkis was supplied to the Editor by the kindness of Mr. Enthoven of the Bombay Ethnographical Survey. It was obtained from an old book in the possession of the State barot of Navanagar State, Kathiawar:—

A Baloch prince named Nazar Mámad had an only child, Kamál Khán, whom he killed at the treacherous instigation of his relations, in an outburst of passion. Determined that none of his relations should sit upon the gadi, he sought for some one who could worthily succeed him, and his emissaries landed at Karanga which now forms part of Okhamandal in the Baroda State, whence they kidnapped Samatji, son of the ruler Sadalji, on Friday, Magsur Sud 13th, Samvat 1614 (Circa 1558 A.D.). Samatji, who was related to the Arambhda Vadhe Rájputs of Jodhpur, married Dalebu, daughter of Nazar Mámad, and became ruler of Makrán. The book from which the information is taken states that his descendants are now known as Gichkis.

Population, which followed, on the rise of the Brahui power, and the acquisition by Nasir Khan I of half the revenues of the country from the Gichkis have been related in the section on History. An account of their connection with Gwadar will be found in the description of that place. The three Gichki sardárs are the only recognised chiefs in Makrán; they are the sardár of Kéch, the sardár of Panigur and the sardár of Tump. The sardar of Kéch takes precedence of all of them. The present sardárs (1905) are Shéh Omar of Kéch, Mír Abdulla of Panigur and Mir Nádil Sháh of Tump. The Sardári of Kéch includes Jamak, Gwarkop Kaush-é-Kalát, Kalátuk, Násirábád, Kulánch, Dasht and the ports of Kalmat and Pasni; that of Tump extends from Tump to Báli-cháh, Nigwar and Jiwnri. The date of this division is not known, but from an extant sanad signed by Mir Nasír Khán I (1750-51 to 1793-4) which refers to it, it appears to have taken place about the middle of the eighteenth century. The two most important men among the Gichkis are sardár Shéh Omar and Mír Mehráb Khán, the sons of the late chief, Mir Báián, but by different mothers. The influence of the former has decreased, and as a result of the settlement which was made in 1898 he has been to a large extent supplanted by his brother. Mir Mehráb Khán was the favourite son of his father, and but for the intervention of the late Sir Robert Sandeman would have become the sardár of Kéch. He appears to have resented this interference with his hopes, and joined in the rebellion of 1898. He enjoys the annual allowance of Rs. 2,260 from the Telegraph subsidy which was formerly given to sardár Shéh Omar, and receives a monthly allowance of Rs. 100 as pay and Rs. 100 as the pay for five levy sowars whom he has to provide when required. He lives in Kaush-é-Kalát near Turbat. Sardár Shéh Omar now receives no allowance.

> Other men of note among the Gichkis are Mír Abdul Karim and Shéh Kásim of Kalátuk, who are brothers and receive Rs. 2,260 from the Telegraph subsidy; Khán Bahádur Muhammad Hasan of Sámi, a Panigúr Gichki, who receives an annual allowance of Rs. 500 from the Makrán revenues; and K. S. Mir Durra Khán, Panigur Gichki of Turbat. Mír Abdul Karim and Shéh Kásim are cousins of sardár Shéh Omar of Kéch. The titles borne by Mír Durra Khán and

sardár Muhammad Hasan were conferred as a reward for POPULATION. conducting the members of Captain Burn's survey party to safety in 1898. Muhammad Hasan is related to the Naushérwánis of Khárán by marriage with the sister of the present chief, Sir Nauroz Khán.

Genealogical trees showing the most important branches of the Gichkis will be found in appendices II and III.

The local distribution of the Naushérwánis is as follows:-

Naushérwánis

Niabat,		Village			No. of Families.
Kéch		Hor (Kolwa)	***		7
77	•••	Maináz (Buléda)	,		I
,,	•••	Hor (Kolwa) Maináz (Buléda) Chib (Buléda)	• • •		4
Panjgúr	•••	Khudábádán	•••	•	5

An account of the Naushérwanis of Kharan from whom the Nausherwanis of Makran are sprung will be found in the latter part of this volume under Khárán. The Naushérwánis of Makran appear to have contracted marriages with the Gichkis so early as the end of the seventeenth century, for we hear of the sister of Ibrahim. Khan of Kharan, who served Sultán Hussain Ghilzai in 1607,* being married to a Panjgúr Gichki (presumably Mír Yalli), by whom she became the mother of Allahdad Gichki, the tenth sardar of Panigur. Doubtless, marriages of Gichki women with the leading family of Khárán also took place and the children would in their turn have obtained a portion of their mother's property by inheritance. A sanad in the possession of the Khárán chief shows that a grant of Pídárk and Kolwa was made to Amír Purdil by Nádir Sháh in 1740, but there is no local evidence that he actually took possession of these localities. Indeed it is said that Purdil died on his way home after receiving the sanad. The grant of such a sanad, however, must have been instrumental in paving the way for the further connection of the Naushérwánis with

Note.—One family is also to be found in Kúhak in Persian Makrán. The total number of the Naushérwánis in Makrán may be estimated from the number of families in the table at about eighty-five.

^{*} G. P. Tate, Kalát, page 33.

POPULATION. Makrán, and it came into special prominence in the time of Jahangir, the chief of Kharan and great-grand-father of the present chief Sir Nauroz Khán. Jahángír married a Gichki woman, by whom he had three sons, Abbás Khán, Mír Lalla and Mohím Khán. Leaving their elder brother to enjoy the chiefship, local accounts state that Mír Lalla and Mír Mohím Khán, who appear to have inherited their mother's property in Panigur, made their way to that place and became military advisers of the Gichki chief. Mir Gohrám, who at first allowed them land and water in Sordo for their subsistence and afterwards in Washbod. Mír Mohím Khán, who was so wedded to freebooting that he is said never to have been able to eat anything that was not stolen, captured Kúhak in Persian Makrán from the Zahrozais, the original owners. He and Mír Lalla then proceeded to attack part of Kéch, taking nearly all the forts which were, however, returned to the owners on payment.

> Later Mir Mohim Khan married a woman from the Bulédai Mírs, and on the pretence of acquiring her inheritance, he and his brother took the whole of Buléda and Mohim Khán settled there. Shortly after Mír Lalla was killed in the course of a raid on Kolwa in which he was accompanied by Mír Gohrám Gichki, and on hearing the news Mír Mohim Khan set out to avenge him. In this enterprise he was assisted by Mir Abbas, the chief of Kharan, Mir Jahángír Naushérwáni, from Tump, and Mír Gohrám Gichki from Panigur. The Mirwaris of Kolwa with 400 men met the combined forces of 3,000 men, but were forced to retreat, and in spite of attempts at settlement by the Jams of Béla, the Naushérwánis ravaged Kolwa from end to end for seven years. At the end of this time the Mirwaris, who had returned with the Jam of Las Béla, surrendered the whole country between Mádagai Kalát and Bédi to the Naushérwánis except Zík, the Mírwári settlement, and Marra, on their pasture-ground, as blood compensation for the death of Mir Lalla. Gradually, most of the lands were re-sold to the Mirwaris and the Naushérwanis now only hold from Mádagai Kalát to Zík.

Quarrels with the Khán.

Mír Jahángír had also inherited a property of Khudábádán in Panigur through his mother which Mir Mehrab Khan of

Kalat (1816-17 to 1839) appears to have confiscated. In POPULATION. 1255 H. (1839 A. D.) however half the revenue was granted by the Ruler of Kalát to Mír Azád Khán of Khárán for services rendered in connection with the supply of a force to Sháh Shuja on his return from India to Afghánistán and to this Nasir Khán II afterwards added half the revenue of Tasp. Quarrels over this property between Khudádád Khán, the successor of Nasír Khán II and Azád Khán led to constant fighting about the Panigur property, the conspicuous features of which were the raid on Súráb by Baloch Khán, Naushérwáni, who will be presently mentioned, and the death of Mír Gájián, the Gichki Sardár and Khán's náib of Panigur, in a raid led by Nauroz Khán, the present Chief of Kharan and they were not set at rest until Sir R. Sandeman's visit to Panigur in 1883-84.

bution.

The Naushérwánis of Kolwa are the descendants of Mír Local distri-The Panigur property is in possession of the descendants of Mír Mohím Khán's eldest son, Kúhak in that of the second and Buléda in that of the third. Their rapid rise in Makrán appears to have been due to their bravery and love of fighting which rendered them acceptable co-adjutors to the proud but inert Gichkis. Had not the British interfered, it seems probable that the Naushérwánis would in time have ousted the Gichkis both from Panigur and Kéch.

> Naushérwáni.

One of the most remarkable figures of recent Makran Baloch Khan history was Baloch Khán Naushérwáni of Kolwa, son of Mír Shahdad and grandson of Mir Lalla, who has been mentioned above. A notorious free-booter and disturber of the peace, his hand was against every man and every man's hand was against him. Expelled from Kolwa by the Kauhdáis and Bízanjaus he took refuge with Azád Khán of Khárán and in 1871 attacked Súráb as a punishment for which the Khán confiscated his property at Chitkán in Panigúr. It was released in 1884 while Sir Robert Sandeman was in Panigur. figured conspicuously in a raid on Panigur in 1889 which was led by K.B. Muhammad Hasan Khán of Sámi, and was forced to fly to Persian territory but, after surrendering at Quetta, was once more pardoned. But his restless spirit once more led him into intrigue and in 1898 while Mehráb Khán, Gichki, attacked Názim Udho Dáss, Baloch Khán led the assault on Captain Burn's camp at Murghi Kallag. He was afterwards

POPULATION. killed when leading the rebels at Gokprosh. In the same fight fell Mehráb Khán Naushérwáni, grandson of Mír Mohím Khán of Chib, Buléda.

Baloch Khán's successor is Mír Sháhnawáz Khán of Hor in Kolwa who receives an allowance of Rs. 90 per mensem from the Makrán revenues. Another son is Akbar Klán who is the Khán's náib of Kolwa. A grandson of Baloch Khán is Muhammad Umar, who led the raid on Kuntdár in 1900 and who is now (1905) a refugee in Afghánistán.

The headquarters of the different families have been given in the statement in the earlier part of this notice. A genealogical table showing the connection of the principal Makrán families with those of Khárán, will be found in appendix IV.

Mirwaris.

Most of the Mírwáris live in the Jhalawán country, their headquarters being the Mashkai Valley and Nondaro. The most influential group in Makrán is the Fakírzai who live at the following places in Kolwa:—

				Families		
Chéri Málár	***	***	•••	•••	7	
Sari Málár	•••	•••	•••	•••	3	
Zík		•••	•••	•••	2	
Pírándarr	•••	•••	•••	***	2	
Marráh	***		•••	•••	I	
Kulli	•••	•••	***	•••	1	
Gushánag		•••	•••	••	3	
					_	

Total ... 19

The insignificance of their numbers is due to constant internal conflicts and wars with the Jadgáls of Las Béla on the one hand and with the Naushérwánis on the other. Six families of Jíhandáris, who are born of Baloch mothers and occupy a social position similar to that of the Tolag Gichkis and Bulédai Mírs, live at Pírándarr; some twenty-five families of Kotwál nomads in Kolwa and a like number of the Hálid section in the Kíl-Kaur Valley. The only other group consists of a few Gazbur Mírwáris in Kulánch.

The connection of the Mírwáris with Kolwa appears to date from very early times. After the great war between the Bráhuis under Mír Bijjár, son of Mír Umar, son of Míro and the Jadgáls, which took place about the fifteenth century, the descendants of Míro, i.e., the Mírwáris are said to have received Mashkai and Kolwa as their share of the country

which was divided. Who they were and whence they came, POPULATION. history does not relate. The Mirwaris claim Arab blood and the claim does not appear to be altogether baseless.

As representatives of the eldest branch of the family from which the Ahmadzai Kháns of Kalát are sprung and as náibs in former times of Mashkai and Kolwa on behalf of the Khans of Kalat they appear always to have occupied a position of sufficient importance to bring them into touch, generally through matrimonial alliances, with the Gichkis and Naushérwanis. With the latter they were formerly at constant feud and the Naushérwánis acquired their foothold in Kolwa at the expense of the Mirwaris, but nowadays they are on specially friendly terms. Under Mir Wali Muhammad (c1883-4) the Mirwaris acquired some power in the country but want of unity and family feuds and poverty have greatly diminished their influence at the present day (1005). Their feuds with the Bizanjaus and Naushérwánis are related in the article on those groups and reference has been made to their bravery and intellectual qualities under physical characteristics.

Jám Hudádád, Fakírzai, of Gushánag is now the ostensible head of the Mírwáris, but the most prominent figures among them are Mír Mazár Khán of Málár in Kolwa and Malik Dínár of Pírándarr formerly of Bédi. Mír Mazár Khán's feud with Mír Kamál Khán Bízanjau of Pídárk about the Pídárk property is a matter of some notoriety and led to much raiding and counter raiding till the case was finally settled in 1903. Malik Dínár is a son of the late Sardár Mír Abdul Karím who died in 1892. The latter was a man of much influence and was the last representative of the Mírwáris who held the post of ndib of Mashkai and Kolwa. Malik Dínár lives sometimes in Pírándarr and sometimes in Manguli Kalát in Mashkai.

The Mirwaris are regarded with much reverence by the other descendants of their common ancestor, Braho, such as the Kalandararis, Gurgnaris, Sumalaris, etc., as being the representatives of the elder branch of the ruling family at Kalat.

The Bizanjaus of Makrán are offshoots of the Jhalawán tribe which has its headquarters at Nál in the Jhalawán country. They consist of a few leading families having Bízaniaus.

POPULATION. considerable influence and a number of scattered groups of Bizanjau tribesmen who are to be found as herdsmen and cultivators in Kolwa, Kulánch, Pídárk and Dasht.

> The leading families are with one exception, all Hammalári Bízanjaus and consist of Mír Kamál Khán of Pídárk and his brother Mír Safar Khán, who sometimes lives in Awaran in Kolwa and sometimes in Jau: Mir Nawab Khan, son of Mír Kamál Khán who lives at Tump; and Mír Bahádur Khán who lives with his son at Awarán. nection of these families with Makran dates from the time when Mir Fakir Muhammad, who died in 1883, was the Khán's ndib of Kéch. This post he had held for forty years during which time he purchased much property for his sons. Mír Kamál Khán and Mír Safar Khán are brothers of the present Bizanjau chief, Mir Kehara. The Omrári branch of the Bizanjaus, whose headquarters are situated at Nál is represented by Mír Yár Muhammad and his son Mír Manda of Chambur. They are Zikris and occupy a social position which is not so high as that of the Hammaláris. acquired their property by gift from the Mirwaris, intermarriage and by purchase.

The Bizaniaus of Pidark, Tump and Awaran have occasionally intermarried with the Gichkis but such matches have generally been due to their wealth and former influence. Mír Kamál Khán of Pídárk is married to the sister of Mír Nádil Sháh, Gichki, Sardár of Tump and to the sister of K. B. Sardár Muhammad Hasan Gichki of Sámi. mother was a sister of the late Mir Baian Gichki, the wellknown Kéch Sardár and his sister is married to Mír Sarfráz Khán, the brother of Mír Mehráb Khán Gichki. His fort at Pídárk is one of the three forts in Makrán which are not now in the hands of the authorities. For some time he was at · feud with the Mirwaris of Malar about his Pidark property which occasioned many raids and counter raids in which Kamál Khán was assisted by Mír Baloch Khán, Naushérwani, but the feud has now been settled. Mir Manda of Chambur, Omrári Bízanjau, who was for some time náib of Ormára in Las Béla receives Rs. 480 per annum from the Telegraph subsidy.

Though no tribal organisation exists, the Bizanjaus are ready to combine in times of emergency. A feud between

the Bizanjaus of Daddeh and Nilag and the Rinds of Mand is POPULATION. said to have lasted seventy years and to have ended creditably to the Bizaniaus. In more recent times the Ormára Bizanjaus were at feud with the famous freebooter Baloch Khán, Naushérwáni, of Kolwa. The feud originated with the Kauhdáis to whom Mír Fakír, an Omrári Bízanjau was related by marriage. Mír Fakír espoused the cause of the Kauhdais and all the Bizanjaus in Kolwa, Nondaro and Jáu took part and Baloch Khán in spite of assistance from Mír Abdul Karím, Mírwári, the Khán's náib in Mashkai and Kolwa was worsted and obliged to fly to Khárán.

The other sections of importance among the Bizanjaus in Makrán are the Bahádurzai, Sháhalzai and Siáhpád who live in Sardasht, Pídárk and Kolwa respectively.

The Baloch form the middle class of the community. They generally possess land and are organised in small communities, each under the kauhdd or headman, who acts as a buffer between the chief or the administration and the members of the group. Formerly in times of emergency, the kauhdd collected his people or so many of them as were required for the object in view and he generally led them in action. He still occupies a position of considerable influence and instances have been known in which these kauhdás have successfully frustrated attempts of the chiefs to exact excessive revenue. The important groups among the Baloch are represented by the Hots: Jadgals with whom the Bands of Kulánch and Mehdizais of Gwádar are connected: Kalmatis, Kattawars, Kauhdáis, Lundis, Raís, Rinds, Sangurs, and Shehzadas in Kéch and by the Barrs, Kashanis, Kénagizais and Mullazais in Panigur; other groups of respectable status but of small numerical strength are the Lattis, who claim affinity with the Kalmatis but do not enjoy the same social status, Mullais, Puzh and Wadéla. Mention may also be made of the Zámuráni-Baloch and Koh-Baloch who are the nomads of the country and of whom some mention will be found under the localities in which they reside.

The Hots, whose name is said to be derived from an eponym meaning a warrior, are strongest in Tump, their headquarters, where they number forty-seven families or about 235 souls They are also to be found in small numbers at

The Baloch.

Hots.

POPULATION. Kaláto in Dasht and in Gushtang and Shahi-Tump near They claim affinity with the blue blood of the Rinds and are accepted as connections of that group on the authority of the Baloch couplet:

> "Mir Jalál had four sons: Láshár and Rind were the chiefs: Hot and Baloch the flockowners ".

A reference to Mír Ialál, the traditional ancestor of the true Baloch, will be found in the article on the Rinds. Holdich and Mockler, however, ascribe a much more ancient origin to the Hots, the former identifying them with the Horaitai or Oraitai of Alexander's time and the latter with the Utii of the army of Xerxes.*

Local history relates the supersession of the rule of the Rinds by that of the Hots and the ruins of the Miri of Punún, the Hot, the story of whose love affair with Sassi is so popular in Upper India, are still to be seen opposite Turbat on the right bank of the Kéch Kaur marking their ancient power. The Hots were in their turn ousted by the Maliks.

Though claiming connection with the Rinds, the Hots do not generally intermarry with the latter. Marriages of their girls are occasionally arranged with the dominant classes and the issue does not lose in social status. The dominant classes do not give their daughters to the Hots in return. They have no recognised head or chief and are almost as democratic as the Rinds, the Hots of Tump having nothing to do with the Isazai Hots of Shahi-Tump and neither having anything to say to the Hots of Kalato. They are better behaved than the Rinds, probably owing to their possession of irrigated property in the tracts in which they live. Their lands were in former days revenue-free but like others they have been assessed to revenue under the present administration.

The Jadgals.

The name Jadgál is applied specially to the small group, numbering about 150 families or 750 souls, which inhabits the réses of Bélár, Nalént and Kocha in Kulánch and still retains the Jadgál language. Jadgáls are also to be found in fairly large numbers in Persian Makrán especially round Báho and Dashtiári.

^{*} Vide page 31, Journal of A. S. B. Vol. LXIV, part I, No. 1 1895

As has already been mentioned, Jadgal or Jat settlements Population. in Makrán can be traced in Arab histories to the first centuries of the Muhammadan era. They are described as holding the country between Kirmán and Mansúra in Sind. but whether they came from the west or the east is not stated. The lats or ladgals, however, appear to have been a purely Indian people and the presumption is that their migration had brought them to Makran from the eastward.

But though the name Jadgál is now confined to the small group in Kulánch, a large proportion of the so-called Baloch of Makran are certainly connected with them. Among these may be mentioned the influential RAÍS group which claims connection with the Jámots of Las Béla and acknowledges that it has been living in the country since the remotest past and whose members are scattered throughout the country both inland and along the coast. Another section of Jadgáls is the Kénagizai living at Isái in Panigúr and the great Sangur tribe is also of Jadgál origin.

The Mehdizais are again an offshoot of the Sangur but now independent of the parent stock and living round Gwadar. Other groups connected with the Jadgals are the Band of Nalent in Kulanch, the Korak* of Kolwa and the Chilmarzai Méds of the coast.

The Kalmatis are said to derive their name from Kalmat. the Calama of Nearchus and the place of their first settlement. It is, however, known that refugees who had adopted the tenets of the Karmatian heresy became refugees from Bahrein and Al Hassa in the tenth century and migrated towards Sind, and it is a matter for speculation therefore, whether the name Kalmati does not preserve the memory of the heresy or of its progenitor.

The Kalmatis are estimated to number twenty families or 100 souls in Pasni, twelve families or sixty souls in Kalmat and twenty families or 100 souls in Gwadari-Nigwar. These figures do not include a large number of servile dependants in personal attendance upon them. Their head quarters are Pasni where the present Kalmati chief, Mír Mahmúd, resides (1904). He receives an annual allowance of Rs. 520 from the Makrán

Kalmati.

^{*} Some interesting information about these pirates whose insolence led to the subjugation of Sind by Arabs will be found in Elliot's History of India, Vol. I, 508.

POPULATION. Telegraph subsidy. The Kalmatis claim Rind descent and are accepted as connections by the Rinds. Mockler,* however doubts the assertion and attributes the alleged connection to intermarriage. The Kalmatis appear to have soon acquired complete ascendancy over the Méds of the coast soon after their arrival in Makran and proceeded to organise from among them bands of buccaneers and pirates which extended their depredations from the Gulf of Omán to Goa. sea fights between the Kalmatis' hero Hammal-é-lihand, the ruins of whose well and a fort are still to be seen in Gazdán-Bal, and the Portuguese are commemorated in the Kalmati ballads, and it seems probable that Kalmati piracies may have led to the burning of "the beautiful and rich city Pessani" by Luis de Almeydat in 1581. The celebrated Hammal eventually lost his life in a fight with his Portuguese enemies. In latter times the Kalmatis appear to have come nominally at any rate, under the sway of the Gichki rulers in Kéch and to have paid a small quit rent for the occupation of Pasni where they levied tithes on the fish and customs on trade and controlled the fishing population. Their influence continued gradually to decay though in 1863 they were considered of sufficient importance for the subsidy already mentioned to be conferred on their chief in connection with the protection of the Indo-European telegraph line. Ross mentions that in 1868 the Kalmati chief Mir Bahram recognised the paramount authority of Kalát and paid the revenue of his district to the náib of Since then, however, the complete control of Pasni has fallen into the hands of the Khan's officials,

> The Kalmatis enjoy a social status second only to the dominant classes in Makran and superior to that of the Rinds. The dominant classes take wives from them without loss of social status to the issue. Their ballads tell of a prolonged feud with the Burfats of Las Béla immediately after their settlement. Later, they were at feud with the Kauhdais of Kolwa and with the Rinds, but these feuds no longer cause any trouble.

Kattawar.

The Kattawars, numbering ten families or fifty souls, inhabit the country round Kaush-Kalát near Turbat. Thev

Vide page 31, Journal A. S. B. Vol. LXVI, 1895.

[†] Vide Portuguese Asia, Vol. II, Chapter XX, page 373.

claim Rind affinities and enjoy much the same social status POPULATION. as the Hots, Raís or Lundis which is somewhat inferior to that of the Kalmatis and Kauhdáis. They are endowed in the eyes of their fellows with some religious sanctity and most of them enjoy the title of mullá. They are large landowners, much of their land was formerly revenue-free but it has now been assessed. They have no recognised head.

Kauhdái.

The Kauhdáis (thirty families), whose name is a corruption of the Persian word Katkhuda are strongest in Kolwa, but twenty-nine families of them are also to be found scattered throughout Makrán, especially in Nigwar. Their head-quarters are Balor in lower Kolwa. Their claim to be connected with the Rinds is generally accepted and they hold a position analogous to that of the Kalmatis. The dominant classes take wives from among them, but the issue of such unions does not lose in social status.

The Kauhdai country in Kolwa, which they are said to have acquired with the sword, extends east and west from Mádag-é-Kalát to Síhén Kaúr between Osháp and Sámi. In Nigwar they hold the office of principal headman (Kauhdá), After Makrán passed under the control of the Kháns, the Kauhdáis were assessed to revenue at one-tenth and Zarr-é-sháh was also taken from them with one or two exceptions. A full explanation of the system will be found in the chapter on Land Revenue. The Kauhdais have always been famous for their warlike disposition. They had many feuds in times past with the Rinds and Kalmatis and in later days with the Naushérwánis. Their present chief Gangozár, their headman Mír Ghulám Ján and other Kauhdais of Balor possess a share in the revenues of Jamak and Gwarkop in conjunction with the Khan and the Gichkis. The Kauhdais obtained their share from that of the Gichkis, in blood compensation.

The Lundis are numerically insignificant numbering about fifteen families or seventy-five souls and live in Kaush-Kalát near Turbat. Ethnically they are connected with the Kashánis of Panjgúr who are again said to be Shahwánis from Iskalku near Kalát. Local stories give the meaning of their name as "tailless", a contemptuous appellation applied to them on their first arrival in Kéch without a following. They entered the service of the Gichkis and having distinguished

Lundi.

Population, themselves in that capacity acquired influence and opulence and a social status similar to that of the Rais, Kattawars and other respectable groups in Kéch. In course of time they acquired landed property, which the Gichkis allowed them to hold revenue-free, but they are now assessed to revenue. Their present head is Mír Adína.

Rais.

The Rais is considered one of the largest tribes in the country. It is dispersed throughout the Kéch and Panigúr valleys and along the coast west of Pishukan and extends westward to Báho and Dashtiári in Persian Makrán. No estimate of their total number has been made, but the élite of the tribe, which lives in and around Turbat is estimated to number fifty families or 250 souls. They are the most important and influential of the so-called Baloch of that locality, and consider themselves superior in social status to all others.

They claim affinity with the Jámot of Las Béla, but the period at which they settled in the country is unknown. It is probable that they represent the Zats or Jadeáls mentioned by the early Arab authors as inhabiting Makran, for their appellation among other groups is behdár or rootholders, indicating the great antiquity of their settlement.

The Musazai Raís, the section of the headman, possesses a social status similar to that of the Kalmatis, Hots and Kauhdáis, with whom they frequently intermarry.

The dominant classes do not, however, take wives from among them. The Rais are large proprietors in Turbat and the neighbourhood, and nearly half of the landed property in Kéch proper between Apsar and Kalátuk is estimated to pelong to them. Formerly they were revenue-free, but they are now, with a few exceptions, assessed to revenue. Their present head (1905) is Mullá Khudádád, a man of great influence, about eighty years of age. He took a prominent part in the disturbances which ended in the fight of Gokprosh in 1898. The Rais are peacefully inclined and more civilized than any other tribe in Makrán.

The Rinds.

The Rinds constitute the most important division of the Baloch race; indeed, the title of Rind is loosely applied by outsiders to the Baloch as a whole. So great is their reputation as being of the bluest blood that every Baloch will endeavour, by fair means or foul, to show his consanguinity with the Rinds. Their name in Persian signipoles a "debauchee," "a turbulent, reckless, daring man." In Makran they occupy Mand with their headquarters in Gaiab, Aspikahn and Wakai with Dashtuk, the western part of Zamuran. They have also acquired property in Tump and Dasht. The Rinds of Shoran in Kachhi are an offshoot of their stock, and the name is borne by various groups in the Déra Ghazi Khan, Déra Ismail Khan, Muzaffargarh, Multan, Jhang, Shahpur and Montgomery Districts of the Punjab. Though recognised as a tribe in Makran, they in reality consist of a number of small independent eponymous groups, including, like other Baloch tribes, alien elements, such as the Mandash from whom they originally acquired Mand. These alien units have been merged in the general body and have now lost their original identity.

They are estimated to number 655 families or 3,275 souls. The principal groups living in Makrán are nineteen in number, and are as follows:—

(1) Gazakandi.	(11) Sháhalzai.
(2) Pérozai.	(12) Mírozai.
(3) Khiázai.	(13) Sháhozai.
(4) Mullázai.	(14) Omarzai.
(5) Bugáni.	(15) Kahmaki.
(6) Bangízai.	(16) Gohrámzai.
(7) Míránzai.	(17) Askáni.
(8) Táhirzai.	(18) Dagáráni.
(9) Kolagi.	(19) Núháni.

(10) Sheh-o-Mír.

Of these, only the Gazakandi, Askáni, Dagáráni and Núháni require special notice. The Gazakandi, who also call themselves Dombaki and Bangwár, are the section from which the Rind chief would be drawn if the intensely democratic spirit of the Rinds would ever permit their having one.

When a crisis arises they do indeed elect some one to act as their leader and spokesman, but his influence is never permanently established. An instance recently occurred in which a Gazakandi, Wali Muhammad, was elected chief but his son and cousin were killed in the following year and he himself no longer possesses any power. In 1903, when migration to Persian Makrán was contemplated, a chief was selected from another section, the Pérozai. The Askánis are the most numerous clan of the Rinds in Makrán and may almost

POPULATION. be termed an independent tribe. They are scattered in Zámurán, Dashtuk and Persian Makrán and the Gholám-Bolaks of Kachhi are connected with them. The Dagáránis occupy Aspikahn and Wakái. Offshoots of the Núhánis are the Kosag and Lagor, but they are not recognised as being of true blood. In Persian Makrán the Durrázai Rinds occupy Geshtagán and Bampusht.

> The Rinds allege that their ancestors journeyed to Kirmán from Aleppo in Syria, where they met the ruler of that province at Jagin between the mouth of Minab river and Bampur. Hence they moved forward to Makrán, but the exact date of their arrival cannot be traced. It appears, however, to have coincided more or less with the period of the Arab invasions of India. Local information asserts that after the fall of the empire of the Caliphs, the Rinds succeeded the Irákis in the government of Makrán. Their traditions as given in the Tuhfat-ul Kirám trace the expansion of the tribe from 'Jalál-Hán, a descendant from Harún Makráni who was governor of Makrán under Hajjáj (705 A.D.). About the fifteenth century part of the Rinds made their way eastward into the indus valley and north-eastward to Kalát. Mír Chákar, the hero of all ballads among the eastern Baloch, is said to have been born in Ashal-é-Kalát in lower Kolwa at this time. Henceforth the Rind power in Makran dwindled, but they are still proverbial for their pride, arrogance and punctiliousness on points of the Baloch code of honour. "A Jám may be Jám, but he is Jadgál by descent, and therefore is no equal of the princely race of the Baloch," is their favourite saying.

> The decay of the Rinds may be attributed to the individualism, to which reference has already been made and which is proverbial throughout the country. Mockler* noted that the tribe had never acknowledged the authority of any ruler, and that each individual member of it professed to owe obedience to no man, whence the tribe had no recognised head. As an instance of the intensity of the feeling, the story is told that when Mir Chakar, the Rind, went to Delhi he took his seat on the throne, whereupon his fellows crowded round on the arms and other parts, and one man, who could find no other place, sat on the spike at the top with the result that the throne broke and all fell down. It is needless

^{*} Loc. cit: page 30.

to say that dealings with the Rinds are rendered extremely POPULATION. difficult by the factiousness which their individualism engenders.

Though prepared to unite against a common enemy in a crisis, the various sections have always been characterised by their turbulence. The outrages which they had committed previous to Sir Robert Sandeman's visit to Makrán in 1883-4 have been mentioned in the section on History, and under the settlement then effected the Rind representatives agreed on February 4, 1884 to be responsible for the good conduct of their respective sections, to prevent injury by their tribesmen to the telegraph line, Government servants, or British subjects, to produce perpetrators of such outrages for punishment by the British Government, and to arrest, if possible, disaffected or refractory members of the tribe. The Gichki Sardár of Kéch and the Khán's náib undertook at the same time to supervise the Rind headmen, to assist them in effecting arrests and to prevent future outrages.

At the present time the Rinds are independent and pay no revenue on their lands in Mand but political control is exercised over them. Owing to the levy of revenue on their property in Tump and Dasht in 1903, they were prepared to migrate in a body to Persian Makrán, but eventually abandoned the idea. Their behaviour has much improved, but inter-sectional quarrels are frequent and murder is not uncommon. In former times their indiscriminate raiding, cattle-lifting and robberies involved them in constant feuds with their neighbours. Those with the Kalmatis and Bízanjaus were especially notorious, the latter being alleged to have lasted for seventy years. All these feuds have now, however, been set at rest.

The Sangur is another numerous tribe scattered over the country from Las Béla on the east to the Persian border on the west and extending even into Persian Makrán. They are strongest along the coast between the Basol and Rumbar rivers, where they number 877 families or 4,385 souls. They are undoubtedly of Jadgál origin and claim affinity with the Jokhiás of Sind. Their traditions assert that their earliest migrations took them from Sind towards Kalát, near which place they were settled for a long time, but afterwards were driven down into Makrán, possibly in the great

Sangur.

POPULATION. Bráhui-Jadgál war, which took place about the fifteenth century.

Most of them are nomads and they are famous as camel breeders. The usual occupation of a Sangur is flock-owning, but his Jadgál origin is exhibited in his natural propensity for cultivation, and whenever his wanderings conduct him to a place which is fit for cultivation, he quickly forms a permanent settlement and adopts the life of a cultivator. The Mehdízais, an offshoot of the Sangurs living near Gwádar, and those settled in Kolwa and other parts of the Kéch valley are instances in point. Their head (1905) is Mír Dost Muhammad, Kannar, who resides in Soragi near Turbat.

Shehzádas.

Numerically the Shehzadas are insignificant, numbering only some twenty-seven families or 135 souls. Their head-quarters is Jiwnri and a few families are to be found in Gabd in lower Dasht. Some also live in Baho-Nigwar in Persian Makran. Their name indicates that they are the descendants of a Shekh * or religious leader, but they claim Afghan descent and assert that their forefather, named Jamand, † came from the country of the Marwats in the Bannu District in the time of Malik Muzaffar Shah. To Jamand is attributed the work of conducting the combined Kéch and Nihing rivers through the Gokprosh Range into Dasht in payment for which he acquired Gabd. Jiwnri was obtained in blood compensation for one of their chiefs, Mir Khia, third in descent from Jamand, who was killed by one of the Maliks.

Later they were repeatedly attacked by the Arabs of Rásul-Khéma and by the Persians and, as a result, the whole of the male portion of the Shehzádas is said to have been annihilated. Mír Jahángír, Naushérwáni, who lived at the close of the eighteenth and beginning of the nineteenth century, on being expelled from Khárán, visited Jíwnri and married the daughter of Mír Siráj, the Shehzáda chief who had been killed in the fights referred to. Many of the present Shehzádas are descendants of Mír Jahángír, but some are

[•] In Makran h is frequently substituted for kh. - Ed.

[†] According to Afghan genealogies Jamand was a son of Khairud-dín alias Kharshabún, son of Saraban. Some of the Jamands are now to be found in the Pishín tahsíl of the Quetta-Pishín District-See page 139, Census of India, 1901, Vol. V, Baluchistán.

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also sprung from posthumous sons of the Jamands killed by POPULATION. the Arabs and Persians.

The Shehzadas occupy a social status equal to that of the Kalmatis and the Kauhdais, and all claim the distinction of prefixing *Mir* to their name. They possess unirrigated lands in Gabd, Nigwar and round Jiwnri as well as in Baho across the border. The Jiwnri Shehzadas formerly held the right to the tithes on fish and customs duty on trade at Jiwnri at the same time paying a nominal quit rent to the Gichki sardar of Tump. They have recently been deprived of this source of income, however, and many have left Jiwnri and settled in Pishukan in Maskat territory near Gwadar. Most of them are in the service of the Indo-European Telegraph department, which uses them for escort duty. Their present head, Mir Aulia, is a Jemadar.

The Barrs are a powerful group in Panigur, numbering sixty families or 300 souls, whose head quarters is at Kohbun. They trace their descent to the Bedouins, and as they are characteristically turbulent, this assertion may be correct. Crossing the Gulf of Oman they assert that they settled in the valley of Peshin to the west of Mand, where they are still to be found in large numbers and are known as Barr-o Bulédai owing to intermarriages with the Bulédais. A part of the tribe afterwards migrated to Panigur, where the then sardar assigned them the Kúcha of Kohbun, and their Kauhdá eventually became one of the leading men of the locality. The father of the present Kauhdá, Usmán, a youth of fifteen years, enjoyed so much influence that he was made náib of Panigur after the removal of Sardár Muhammad Ali Khán Gichki. The present Kauhdá is connected with most of the leading Baloch families in Panigur. Most of the Barrs are nomads, engaged in flock-owning and camelbreeding. They also possess some dry-crop cultivation in Kohbun, and their Kauhda owns irrigated property in Bunistán (Isái), Tasp, Garmkán and Chitkán. Their predatory habits have involved them in feuds with many of their neighbours in times past, but they are now quiet and orderly.

The Kasháni, numbering seventy families or 350 souls, is another powerful tribe in Panjgur, whose head quarters is at Dasht-é-Shahbanz. They are an offshoot of the Shahwanis of Iskalku near Kalát, one of the leading families of the Barr.

Kashán.

POPULATION. Shahwanis having migrated on account of an inter-tribal quarrel with 700 families in the time of the Maliks. Their name appears to be a corruption of Kishani, the designation of one of the large clans of the Shahwani tribe and they still keep up their connection with the Shahwanis of Sarawan. Owing to quarrels with the Gichkis most of them migrated in the course of time to Chakansúr in the Helmand valley.

> The Kashanis are divided into two sections, the Mastar Kasháni or leading family said to be Ramdánzai Shahwánis and húrt Kasháni, or ordinary Kashánis. Their social status is similar to that of the Barr. Like the Barrs, too, the Kashanis are flock-owners and camel-breeders and they also possess some dry-crop cultivation in Shahbanz. Their Kauhdá, now (1905) Muhamad Hasan, a young man of some twenty years of age, owns irrigated property in Bunistán.

Mullázai.

The Mullázais are another influential group in Panjgúr, numbering 100 families or about 500 persons. Their head quarters is at Tasp. Their original habitat is said to have been Shiraz in Persia, and they are related to the Mullazais of Kalát, who long held high office at the Kalát court. In the course of their migration from Persia some settled in Dizzak, and others in Panigur.

They are large proprietors and own irrigated lands chiefly in Tasp, where they have opened out three ruined Karezes, and also in other villages. Some of them are also engaged in trade. Their present head is Mullá Abdurrahmán of Tasp (1905).

Kénagizai.

The Kénagizais are estimated to number fifty families or 250 persons and live round the fort of Isái. They are Jadgáls by origin and claim affinity with the Jámot tribe of Las Béla, and they say that they came to Panjgur at the same time as the Gichkis. They have gradually acquired irrigated property in nearly all the villages of Panjgur through intermarriage and purchase. With few exceptions they all pay revenue. They occupy a position similar to that of the Rais of Turbat in Kech and their relations with the Sardar of Panigur are similar to those of the Rais with the Sardár of Kéch. They were much trusted in former times by the Chief of Panigur and one of the towers of the Isai fort was given to them to defend. Their present head is

Kauhdá Mír Nabi Bakhsh who held the strong fort of Isái POPULATION. in conjunction with Kauhdá Muhammad Khán, Barr, against the Kháns' Kárdár, Abid Husain, in the rising of 1898.

Inferior Races.

The inferior races are represented by the Méds, Darzádas (known in Panigur as Nakíbs), Loris and servile dependants. Their position of inferiority is marked by the fact that they constitute the occupational groups of the country, the Méds as fishermen and sailors, the majority of the Darzadas as landless labourers and the Loris as artisans. The servile dependants are engaged in agricultural work and in domestic service. From among the Darzádas is drawn the class of Makráni labourers to be found in other parts of Baluchistán and in India. All these classes seldom eat with the Baloch and are not entitled to receive the news if even the meanest Baloch is present.* They cannot marry girls from among the Baloch and, if they give a daughter in marriage to a Baloch, they receive insignificant sums as bride-price. Their blood-compensation, too, is a comparatively insignificant sum. Locally they are regarded as the aboriginal races of the country.

The Meds.

The Méds, who are estimated to number 1,189 families or 5,945 souls, are to be found throughout the length of the Las Béla and Makrán coast and possess many of the characteristics attributed by Arrian to the Ichthyophagoi. From inscriptions still existing at Gwadar, it appears that the nucleus of the tribe came from Gandavá in Kachhi, an origin which corresponds with the historical evidence available regarding their early habitat. † It is also remarkable that their patron saint is Sakhi Tangav, whose tomb is at Dádhar in Kachhi.

In the course of centuries, the Méds appear to have absorbed a large admixture of alien and slave blood, the latter being especially noticeable between Gwadar and Sonmiani in Las Béla. From Gwádar westward most of them are connected with the Rais. Being an occupational group, those joining them have lost any social status or racial distinction they may have formerly possessed. The typical Meds are

[•] The tests of social precedence are discussed in a later part of this work.

[†] Sir Henry Elliot in his History of India, Vol. I, page 521, refers to the connection of the Méds with Upper Sind.

POPULATION. those living between Gwadar and Sonmiani. Internally the Méds are divided into Méds proper, who carry on the profession of fishing and the Korás or seafaring men.

> Those of known descent, whether Méds or Korás are termed Méd and those of unknown descent, doubtful origin or slave extraction, are called Lánga, i.e., slave. The Méds of known descent are divided into four groups: (a) Chilmarzai, (b) Jalárzai, (c) Gazbur and (d) Ormári, commonly known as Olmári. The Chilmarzai constitute the élite of the Méd tribe and trace their origin from the Lúmris, Númris or Númriás of Las Béla. The Jalárzai and Gazbur claim Baloch descent. The Olmári allege an Afghán origin. At each port of importance the Méds recognise the authority of their Kauhdá who acts as a medium between the people and the Government. The ethnography of the Méds offers a most interesting field of study. They are typical sailors of the East, spendthrifts, happy-go-lucky and extremely superstitious.

Darzáda or Nakibs.

These people, who number 5,395 families or about 26,975 souls, are one of the most numerous of the races of Makrán. They live scattered throughout the country and are even to be found among the coast population. In Panjgur they are known as Nakíbs. Their head quarters is Kéch proper, i.e., the tract between Sámi and Násirábád; in Panjgúr they occupy the irrigated lands on both sides of the Rakhshán As already mentioned, they are considered the aborigines of the country.

The Darzádas of Kéch are divided into two classes: the Bázáris, the section of the headman, and the ordinary Darzádas. Among the Nakíbs, the Rádézais are of the best blood. The Darzádas of Kéch are more wealthy and better organised than the Nakibs of Panigur. The Darzádas are led by a headman whose influence in the turbulent past caused him to be much sought after by the sardars of Kéch. In Panjgur, the Nakíbs live in separate groups, each under its own headman. Marriages with are less frequent in the case of Darzadas than with the Nakíbs.

The connection of the Méds and Korás appears to have been very ancient. Vide Memoirs D' Histoire et de Geographie Orientales par M. J. de Goeje, No. 3, 1903. Memoire sur les migrations des Tsiganes á travers l' Asie.

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Their chief occupation is agriculture; the majority POPULATION. cultivate the land on behalf of the owners and are paid They constitute the source from which the supply of labour in Makrán is drawn and follow various handicrafts as shoemakers, potters, weavers, etc. They would also probably make excellent domestic servants. Most of the Maulvis and Qázis of Kéch are Darzádas.

The Darzadas have a great reputation for bravery and are more hardy and athletic than any of the other Makrán races. They have always taken a prominent part in all local fights, but their natural inclination is towards peaceful occupation. Their morals are lax and, unlike other races they are indifferent about the marriage alliances which they contract, and have no hesitation in giving their daughters to Loris and servile dependants. The wealthy, however, will not marry their daughters to a Gichki, under any circumstances, as her issue will be debarred from inheritance.

These curious gypsy folk are scattered throughout the country, and may be divided into two classes, those who are settled and those who are nomadic. The settled Loris are not numerous, their numbers being estimated at some 300 families or about 1,500 souls. Their main divisions are the Sarmastáris, the descendants of Sarmast, and the Zangisháhis. Most of the Loris in Baluchistán trace their origin to Sarmast. The Zangisháhis are alleged to have accompanied the migration of the Gichkis from India, which ended in the settlement of the Gichk valley, and are most numerous in Panigur. Loris, whether settled or wandering, are either handicraftsmen, such as carpenters, blacksmiths and goldsmiths, or musicians and ballad-reciters. The latter seldom compose themselves, but sing the ballads of others, celebrating events of importance in verse. Each occupational group above mentioned is distinguished by a special appellation. a carpenter is known as a dár-trásh Lori; a blacksmith as an asinkár Lori and a goldsmith as a sargar Lori. Musicians are known as Dohli, i.e., drummer and balladreciters as Pahlawán. The latter are considered the most respectable. Besides pursuing the handicrafts mentioned above, the wandering Loris practise jugglery, palmistry and fortune telling. One of their special characteristics is the bartering of donkeys in which they are exceedingly "slim."

Loris.

POPULATION. The story goes that a Lori began the day with a donkey worth five rupees and after bartering fifty donkeys was in possession of one worth a hundred. They are known as rogues and vagabonds and their petty thieving and cheating are proverbial. Certain menial duties are assigned to them on the occasion of marriages, deaths and circumcisions. They include cooking for the guests, filling the hukkas, and the spreading of carpets and mats. At weddings they shave, wash and clothe the bridegroom, beat drums and play musical instruments; while the Lori women attend on the female guests and wait on the bride. A Lori woman who does this is called mashsháta. At funeral feasts the Loris may not wash the hands of the guests, but this must be done by one of the equals of the corpse. At weddings he receives tips from all, and also a suit of clothes, and at funerals a small cash present from the heirs of the deceased. He performs the operation at circumcisions.

Servile dependants.

Servile dependants are to be found in almost every household and their numerical strength may be judged from the large number presented in dower by the dominant classes.* Those who cannot afford to give them food and clothing send them out into the world to earn their livelihood for themselves. The bond of connection does not, however, cease thereby, and many of them are to be found at large, living apart from their masters and earning their own livelihood, but still not emancipated. They are liable to work for their master at any time in exchange for food and clothing, but their independent earnings are not appropriated.

The slaves from whom these servile dependants are descended are alleged to have been imported originally by the Méds from the African coast through Maskat, but if the theory of the learned German, Dr. Glaser, is correct that the original home of the Habash was in South-east Arabia, it is possible that this element of the population is one of the oldest in the country, for their features are in many cases distinctly Negritic in type. Other servile dependants are to be seen with Baloch characteristics, who are the descendants of Baloch men and women who were captured in inter-tribal wars and were afterwards sold or bartered.

[•] See paragraph on Dower, supra.

Khojas are known as Lotias. Their estimated number is POPULATION. as follows: Gwádar 250, Pasni 26, Isái 5: total 281. head quarters is at Gwadar, where they have permanently settled, and whence those at Pasni and in Panigur have migrated. Their original home was at Cutch Mandvi in the Bombay Presidency and they are said to have settled in Gwadar five generations ago. They almost invariably stick to the coast and are all engaged in business, which is in most cases wholesale rather than retail. It is in this respect that their methods of trading differ from those of the Hindus. Much of their capital is sunk in the fishing trade, and they also deal in matting, cotton and wool, which they export in return for piece-goods and food-stuffs. They acknowledge the authority of the Aghá Khán, who is represented by a local mukhi. This man decides petty disputes. They also have a bancháit and a masiid at Gwadar. recognised as British subjects, and their interests are supervised by the Director of the Persian Gulf Telegraphs. possess no political influence.

The distribution and estimated strength of the Hindus is as follows:--Gwadar 200, Pasni 41, Kalmat 5, Kolwa 10, Kéch valley and Dasht 20, Panigur 3; total 279. Their head quarters, like that of the Lotias, is at Gwadar, but unlike the Lotias they have not permanently settled there and generally return to India in their old age. Their first settlement is said to have taken place about four generations ago: they migrated from Sind with which province they still maintain their connection. Married men are seldom to be found outside Gwadar. They belong to the following castes: Bhátia, Multáni Serái, Lohána, Sindi, Punjábi, and Chápra.

The entire trade of the interior is in their hands, and it is mostly carried on retail and by barter. As in other parts of Baluchistán, the Hindus find it difficult to conform rigidly to the demands of their religion, and they drink from the hands of Muhammadans whom they employ as domestic In several instances Hindus have married slave girls, the children being brought up as Muhammadans. They have no political influence and occupy a position of inferiority. At Gwadar their affairs are managed by a panchdit which decides petty disputes, and also collects the fees for the maintenance of their temple.

Khojas or Lotias.

Hindus.

POPULATION. moral characteristics.

The dominant classes. Gichkis.

The physical characteristics of the dominant classes differ Physical and little from one another. Their features are, as a rule, oval and regular, the eyes large and dark or hazel in colour, the nose long and straight, the complexion fair and sometimes olive, the hair black and the height medium, about 5 feet 6 inches. The younger men are thin and wirv, but age develops a tendency to corpulence. The hair is either worn long and tied in a knot and turned up over the head or cut at the nape of the neck, a fashion said to have been introduced by the Naushérwánis. Some of the handsomest men in Makran are to be found among the Mirwaris. The Gichkis of Panigur can always be distinguished from those of Kéch by their darker complexion.

> The Kéch Gichki is lazy, indolent, proud and somewhat pompous, but hospitable and more generous than his brother. the Panigur Gichki. The latter is fond of manly sports such as riding, hunting, shooting, etc.

Naushérwánis.

The Naushérwánis are brave but arrogant and very touchy on points of Baloch honour. Sir Thomas Holdich * remarks that "as a fighting, raiding, restless clan they are perhaps unequalled on the border." They are hospitable and extravagant in their liberality.

Mirwaris.

The Mirwaris, like the Naushérwanis, are brave and courageous, but their strength as a group has been dissipated in the frequent quarrels that have occurred among them. They are the genealogists, historians and poets of the country, and as ready with the pen as with the sword. They are hospitable in the extreme.

The Baloch.

Through the lapse of centuries of intermarriage any distinguishing characteristics, which the heterogeneous races and groups, now included under the single appellation of Baloch, may have originally possessed, have been lost. They have regular features, with short straight noses, bright black or hazel eyes, and a copper skin. They are of medium size, thin and wiry, with powerful muscles and, with the exception of the Rinds of Mand, who shave their heads when past the prime of life, always wear the long hair gathered at the back and turned up over the head. Unlike the poorer classes of the Baluchistan highlands

MEDS.

they pay considerable attention to personal cleanliness. POPULATION. Of their character Colonel Ross writes:—*

"Makranis are faithful in performing a duty of trust which they may undertake for hire. Though not a bold and daring race, they are usually courageous in danger, and though not eager about running into peril, they are not over-careful of their persons. In their own internal conflicts they generally avoid close fighting, and the bloodshed is consequently inconsiderable. Though not powerfully built, the Makrani is capable of enduring much fatigue and privation, and it is not an uncommon thing for a man to travel on foot at the rate of 50 miles and upwards a day, subsisting by the way on a few dry dates carried in a bag by his side."

It may be added that a fight among the Makran Baloch seldom ends in the loss of more than one or two killed on either side, but the attacking force returns after cutting down date trees, burning the standing crops and destroying the kdrises.

The Darzádas and Nakíbs are well built, robust and Darzádas

muscular, with thick broad shoulders, low wide foreheads, short, thick and almost flat noses and large dark eyes. They are of medium size, and many of them show signs of African blood in the short curly hair and thick lips. Their skin is a dark copper colour and not uncommonly quite black. The Darzáda or Nakíb is, generally, engaged in peaceful pursuits, but in times of necessity few can surpass him in courage, boldness or endurance. He is a jovial and careless fellow and merry to the verge of the obscene. He is hospitable and obliging in matters of courtesy and if trained would probably make a useful and faithful domestic servant. He possesses an institution known as puch-kún to which the members are initiated by drinking a cup of bhang. One of the first tests of membership is the power of keeping one's temper under a storm of abuse.

The Méds are above the average stature with broad heads, oval faces and noses distinguished by the length of the tip. Their skin is brownish and they have hazel eyes. They are strong, athletic and robust, capable of performing marvellous feats of strength and possessing great powers of endurance on the sea. They display the

Méds.

Population, reckless, spendthrift and adventurous qualities of all races accustomed to the ocean. Ashore, however, they are awkward and clumsy. The Méd is exceedingly superstitious and a profound believer in the powers of good and evil spirits. Generally he is squalid and dirty, but on gala days, such as the Id, he loves to turn out in a showy dress. His morals are lax, and by nature he is jovial and careless. He is hospitable and obliging and a rather dainty eater.

Loris.

The Loris are lazy, indolent rovers and wanderers and lacking in the hardiness and power of endurance of most of the other races of Makran. In their spare and low stature, irregular features, dark eyes and complexion. coarse black hair and timidity of nature, they resemble the Dravidian races of India. Their propensities for cheating and general "slimness" are a bye-word.

Servile dependants.

The servile dependants possess all the features of the African type and are a hard working, careless set of people. living from hand to mouth.

Characteristics of the women.

The women of the country are hard working and hard-They possess a cheerful temperament and make good and fond mothers. Reference has already been made to the extremely independent position which they occupy. Excluding women of the dominant classes and of the better class Baloch, those of the poor and nomad Baloch, Darzádas, Nakíbs, Méds, Loris and servile dependants are, generally, of lax morals. They have few amusements except singing and spend the day in household work, the care of their children or in sewing and embroidery.

Religion.

The whole of the indigenous population is divided between two religions, the Namazis and the Zikris. The Namazis are Muhammadans of the Sunni sect and the Zikris are the followers of a Mahdi, whose doctrines differ in many respects from orthodox Muhammadanism. Hinduism of a somewhat unorthodox kind is professed by the Hindu trading classes, and the only other religion is that of the Khoias or Lotias. The Arabs in the following of the Wali of Gwadar belong to the Biasi sect which flourishes in Maskat. Figures of the actual number of Namázis and Zikris are not available, but it is estimated that the Zikris compose half the total population. Some authorities only place the Zikri population at one-third, but as these are Namázis

they are inclined to minimize their number as much as Population. possible. The principal groups belonging to the Zikri sect are the Sangur, Bizanjau, Koh Baloch, Sámi-Baloch, Sájdi and Kíl-kaur Baloch. The Zikris may be said, indeed, to include all the nomads of the country.

It is probable that the introduction of Islam took place early in the Muhammadan era and it certainly occurred not later than the beginning of the eighth century when Muhammad bin Kasim marched through Makran to Sind. The population, however, appears soon to have reverted to heretical observances, for Ibn Haukal, writing in the tenth century, mentions Rasak in Persian Makran as inhabited by schismatics * and Marco Polo, at the end of the thirteenth century, remarks that some of the people are idolators but the most part are Saracens. Later on according to local tradition the tenets of the Shiah sect appear to have been observed and it was to this sect that the ruling family of Maliks belonged. Indeed it would be remarkable if the proximity of Persians had not been felt in this direction.

The practice of Islam, as described in the Census Report † of 1901, applies equally to Makran as to other parts of the Province with the single exception that women are allowed a share in inheritance. The Méds and other dwellers on the coast carry their superstition to the greatest extreme and have a firm belief in the power of pirs. While openly professing Islam nearly all of them observe the rites of one or all of the institutions known as maulúd, sima or rifa,‡ shépar-ja

Islám. Historical.

The practice of Islam Rifa.

^{*}Elliot suggests that these schismatics may have been Karmatian heretics whose name may be still preserved in the tribe of Kalmati. History of India, Vol. I, p. 459, note.

⁺ Census of India, Vol. V, pp. 38 and 39.

[‡] A reference to the Rifdi sect will be found in the Miniature Gazetteer of Gwadar.

The late Khan Bahadur Faziullah's volume on the Gujrat Musalmans, (Bombay Gasetteer, Vol. IX, part II), contains the following information about the sect:—

[&]quot;Rifais, i.e., Exalted, also called Face-slashers (munhphoda or munhchira), occur in considerable numbers over the whole of Gujrát. They are followers of Sayad Ahmad Kabír and speak Hindustáni. Except that they wear the dhoti, waist cloth, they dress like ordinary low class Musalmáns. Holding in the right hand a 12-inch sharp pointed iron spike called the gurs, and having near the top many small iron chains, the beggar rattles the chains and if people are slow in

POPULATION. and the gwdt. The followers of the first are most numerous and are generally called Rifáis The head quarters of the Rifái pir is at Bombay, but his representatives live at Pasni and Gwádar.

Shépar-ja.

The name shépar-ja* is a corruption of Sheikh Faréid-ja, the observances being connected with Sheikh Faríd Shakar Ganj, a saint of great renown, whose shrine is said to be somewhere in the Punjab. Its rites are confined to persons of slave extraction, the patron saint, Sheikh Faríd, having himself been a slave by origin. The ceremonies appear to be connected with the fetish worship of Africa, but it is at the same time a curious fact that the songs which are sung at the times when shépar-ja is performed are in Sindi or Urdu.

Meetings are held on Monday and Friday nights. A drum fixed on a tripod and covered with a red cloth, which is called Mughul-máni, a corruption of Mongar Mánra, is placed in the centre of a circle and men and women together join in the performance of a dance round it while it is beaten by a man with both hands accompanied by four other men beating the ordinary native two-sided drum. The sound of the drum is accompanied by songs which are taken up by the circle of men and women who gradually work themselves into a frenzy of excitement and whirl round and round. The performances last throughout the night with intervals of rest.

Gwát.

The term gwát, also known as sahr, signifies air or spirit and the Méds have so great a belief in such spirits that every disease is attributed to them. No treatment or cure is attempted but the mát or mother of the Gwátis is consulted with a view to the casting out of the spirit to which the disease is due. The institution is spreading rapidly among the Méds who have a firm belief in its efficacy and is said to have reached Karáchi. Unlike other similar institutions in

giving him money, strikes at his cheeks or eye with the sharp iron point and seems to cause no wound. They beg in the name of God and are very persistent and troublesome. Though fond of intoxicating drugs, very few of them drink liquor. They are Sunnis in religion, and though most are of the lawless beshavaa order of beggars, some are law-abiding and have wives and children. Their boys follow their father's calling and they marry their girls to beggars. They are poor."

^{*} Ja denotes the genitive case in Sindi.

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Makrán, it is not connected with any Saint or pir and it POPULATION. appears to have been introduced from Maskat and the Persian Gulf.

The leader of the *Gwdtis*, whether man or woman, is called *mdt* and is believed to be selected by the spirits as their representative or invoker. A person affected by *gwát* or spirit is taken to a selected place known as *aimo*, and is placed at full length on a mat with a sheet over him and incense burning close to his nose. The *mát* now sings incantations to the *gwát* or *sahr* and if the man is really affected by a spirit he begins to tremble and sitting up sways his head and body to and fro at great speed. Presently the patient falls into a kind of trance and the *mát* enquires from the *gwát* what he wants and on what terms he will leave the afflicted person. An answer is then received from the patient that a certain kind of *léb* or meeting must be held and on this being promised, the spirit leaves the patient.

The lébs are of different kinds, all the expenses of which must be borne by the person afflicted. They are known as busoch costing Rs. 2 and lasting some two hours; ramsa costing about Rs. 30 and maintained for three days and nights; tanzil which costs about Rs. 50 and is kept up for the same time; tubbuk costing about Rs. 100 and lasting seven days and nights; and sipa costing about Rs. 500 and lasting for fourteen days and nights. Resort is seldom had to the more expensive lébs which are reserved for the rich.

After the spirit has been cast out, time is taken for the collection of the luxuries which must be supplied to the gwātis or initiates during the léb, and on the people assembling, the first ceremony consists in throwing three morsels of the halwa, which is about to be distributed, towards the north as the share of the gwāt. The halwa is then divided among the initiates and a portion is given to the patient. All are seated in a circle with incense burning in the centre and incantations are recited by the māt in praise of the spirits, the initiates present joining in the chorus. Presently the fervour of the meeting is aroused and those present form a circle revolving round the singers and drummers. A kind of frenzy seizes them and they sway their heads, arms and bodies to and fro as they move. As the

Population, excitement increases individuals leave the circle and whirk round and round until at length they fall into a trance. From these the mát who acts as a leader in the accompaniment of singing and drumming, enquires whether the spirits are satisfied and so the performance ends. It may be mentioned that men and women both take part in these ceremonies but form separate circles. In large towns each sex has a separate aimo.

> Extraordinary meetings for rifa and shépar-ja are held in the fulfilment of vows made in times of emergency and also on an outbreak of disease or in case of social difficulties. The better classes of Baloch of the interior do not, however. identify themselves with any of the observances which have been described. The Méds believe in hosts of saints by sea and land and their superstition surpasses all imagination. Among the local pirs Sheikh Ramadán of Pidárk, a Kahéri Shéh by origin is most popular. Pilgrimages are undertaken bare-foot by men and women to his shrine and sheep are offered to him in sacrifice.

Zikris

The majority of the followers of the Zikri sect live in Makrán, but they are also to be found in Mashkai in the Ihalawan country and along the coast of Las Béla. To the Bráhuis, the Zikris are known as Dái, the alleged derivation being from ddh meaning a "message" in Baluchi; the Zikris call the Korán dái. It is remarkable that the Dáis. Sagetae and Saki were all ancient Scythian tribes, and it is a matter of no small interest that we should find that many of the clans of the Bráhui tribe of the Sájdi, are Dáis or Zikris. The clue appears to be one that is worthy of closer investigation. Although the Zikris call themselves Musalmáns, their creed is full of superstitions and idolatrous beliefs, and the fact that they read the Korán appears to be the only link between them and orthodox Muhammadans. In all matters of practice there is a radical difference between the Zikris and their Sunni co-religionists, as will presently be shown; indeed their views on the main doctrines of Islám are diametrically opposed.

The Zikris derive their name from the sikr, a formula which they repeat in the course of their devotions. Much has been written about them by opponents or partial observers which is misleading and time has not yet been found to make full

enquiries regarding them*. It is known, however, that the POPULATION. leaders of the sect in Makran have in their possession books. a study of which will probably throw full light on their origin and other connected questions. From two of these books, the Safar Náma-é-Mahdi or wanderings of the Mahdi and the Tardid-é-Mahdawiyat or refutation of the dispensation of the Mahdi, it appears that the sect is of Indian origin and was founded by one Muhammad of Dánápúr in Jaunpúr, who is variously stated to have been an Afghán or a Saiad. Expelled thence he made his way to the Deccan where the Ruler was converted, but on the outbreak of a religious rebellion the Mahdi was again driven out and after many wanderings with his immediate followers through Gujarát and in the desert of Bíkánér and Jaisalmér arrived in Sind. Hence he was again expelled from Tatta and thereupon made his way through the Sind valley to Kandahár where Sháh Bég Arghún, son of Zunnún Bég Arghún, is said to have become his disciple. But the mullás and the rabble rose against him and he was again driven away to Farrah in the Helmand valley where the Tardid-é-Mahdawiyat alleges that he died. The Makrán Zikris, however, allege that he disappeared from Farrah and after visiting Mecca, Medina, Aleppo and other parts of Syria made his way to Persia and through Lár (Láristán) to Kéch where he took up his abode on the Koh-é-Murád. Here he preached his faith for ten years and died after converting the whole country.

Such is the account given by the Zikri books and the earlier part of it corresponds with the history of Saiad Muhammad Jaunpúri given by Abul Fazl† who says: "Saiad Muhammad Jaunpúri was the son of Saiad Budhá Uwaysi. He received instructions under many holy men learned in spiritual and secular knowledge. Carried away by extravagance he laid claim to be a Mahdi and many followers gathered round him and numerous miracles are

^{*} The account here given is more complete and accurate than that to be found in Chapter III of the Census Report of Baluchistán, 1901.

[†] Ain-é-Akbari, Jarrett's Translation, Vol. III, page 373. Abul Fazl's father, Shekh Mubarak, had attached himself to the religious movement whose followers came to be known as *Mahdawis*. An account of the rise of the *Mahdawis* will be found in Blochman's Biography of Abul Fazl, Loc cit. Vol. I., P. iii, et seq.

Population, ascribed to him. He is the founder of the Mahdawi sect. From Jaunpur he went to Gujarát and was much in favour with Sultan Mahmud the Great. The narrow-mindedness of the worldlings made India intolerable to him, and he resolved to pass into Persia, but died at Farrah and was there buried." The death of the Saiad Muhammad Jaunpúri at Farrah took place in 1505. He was born about the middle of the fifteenth century about 1442 A.D.

> We thus find in the Zikri faith a remnant of the Mahdawi movement which assumed a definite shape in India at the end of the fifteenth century through the teaching of Saiad Muhammad and of which the last is heard in 1628. The story of the introduction of Mahdawi doctrines into Makrán by Saiad Muhammad bears self-evident indications of improbability. It is more likely to have been brought to the country by some of his numerous disciples, some of whom, e.g., Mián Abdulla Niázi, exercised so much influence in India. There appears indeed to have been some connection between the introduction of the new faith and the advent of the Bulédai rule in Makrán, for all local accounts agree that it obtained a footing synchronously with the Bulédais if it was not actually brought by them. No historical or traditional evidence is obtainable about the existence of the Zikri faith in Makrán prior to the advent of the Bulédais and it may be that the link is to be found in Bú Said, the first Bulédai ruler, whose original habitat is said to have been Garmsél in the valley of the Helmand and close to Farrah and whose date according to the historical data available was probably synchronous with that of Saiad Muhammad.

The faith flourished greatly during the time of the Bulédais and soon spread throughout the country. The Bulédais were ousted by Mulla Murad, Gichki, who gave a great impetus to the Zikri religion about the beginning of the eighteenth century, and who has been canonised in the Zikri calendar. Mullá Murád proceeded to introduce a more complete organization, and is said to have ordained community of property. He also introduced certain innovations in imitation of orthodox Muhammadanism, choosing Koh-é-Murád near Turbat as the Kaaba of the Zikris for their annual pilgrimage and digging a well known as Cháh-é-sam-

sam in front of the Turbat fort. But the expansion of a POPULATION. form of belief so obnoxious to orthodox Sunnis attracted the attention of Mir Nasir Khan I of Kalat, and caused him to carry fire and sword into Makrán. An account of his expedition and of the terrible death suffered by Malik Dinar son of Mulla Murad is to be found in Tate's Kalat.*

The principal doctrines of the orthodox followers of the Doctrines. Zikri faith in Makrán are :-

- 1. That the dispensation of the Prophet Muhammad has come to an end and he has been superseded by the Mahdi.
 - 2. That the Prophet Muhammad's mission was to preach and spread the doctrine of the Korán in their literal sense. but that it remained for the Mahdi to put new constructions on their meaning. That the Mahdi was in fact the sáhib-étáwil of the Korán.
 - 3. That prayer (namás) has been dispensed with, and that instead of namás people should resort to sikr.
 - 4. That the fast of the ramsán need not be kept.
- 5. That the recognized formula of the Muhammadan faith should be dropped and the formula lá iláha illalláh. Muham-الله الاالله صحمل ميلي رسول الله الاالله صحمل ميلي رسول الله should be adopted instead.
- 6. That instead of sakát at the rate of one-fortieth, ushr should be given at the rate of one-tenth.
- 7. That the world and the goods of this world should be avoided.

Practice.

Their religious observances take the form of sikr and kishti. Zikr consists of daily prayers at fixed intervals and kishti of religious services on specified dates. Zikr is repeated in two ways: sikr-é-jali, the formula spoken aloud and the sikr-é-khafi or formula repeated inwardly. They are very numerous, and each sikr consists of about ten or twelve lines. Zikr should be performed six times daily as follows:-

- 1. The zikr of lá iláha illalláh, a sikr-é-khafi to be repeated by every one thirteen times before early dawn at home. It may be noted that all sikrs begin with this formula.
- Gwar-bam or the sikr of early dawn. The words are subhánalá-yarjú, a sikr-é-jali, spoken in a loud voice and finished with a sijda or prostration. After the prostration

^{*} A Memoir on the Country and Family of the Ahmadsai Kháns of Kalát, by Mr. G. P. Tate.

POPULATION. the zikr-é-khafi, lá iláha, hasbi-rabbi, and jallalah jallalah are repeated, and as the sun rises another prostration is made.

- 3. Némroch-é-sikr, i.e., the midday sikr. A sikr-é-jali when all the sikrs except subhána lá-yarjú are repeated. No prostration is made as that is peculiar to the subhán formula.
- 4. Roch-zard-é-sikr. The sikr of the yellowing day, i.e., a little before sun-set. A sikr-é-khafi ending in the subhán formula, also said inwardly with a prostration at sun-set.
- 5. Sar-shap-é-sikr. The sikr for the beginning of night. A sikr-é-jali said at about 10 p.m. in which all the sikrs are repeated in a loud voice except subhán.
- 6. Ném-hangám-é-sikr. The midnight sikr. A sikr-é-khafi repeated by individuals. For the proper performance of this sikr-ld-iláha should be repeated 1,000 times, a sijda or prostration being made after every 100 repetitions.

Kishti.

Kishti is held on any Friday night which falls on the fourteenth of the month, and also during the first ten nights of the month of Zil-hij and on the day following the Id-uz-suha. The principal kishti is held on the ninth night of Zīlhij. Births, circumcisions and marriages are also made the occasions for kishti, and it is also performed in pursuance of vows to do so. The performers of kishti take their places in a circle as for the ordinary Baloch dance. Drums, etc., are not used, but one or more women with good voices stand in the centre of the circle and sing the praises of the Mahdi in verse, while the men circle round and repeat the chorus. singers change from song to song accompanied by the men in chorus. When the singer comes to the word Hádia, the men answer gul Mahdia. Hadia means "Who is the leader in the right path?" and the answer is "Our flower Mahdi". The kishti ends when all are tired. In the villages and towns the women hold separate kishtis and sikrs but among hill Baloch men and women join without distinction. The reports that at these meetings immoral and even incestuous practices are in vogue appear to have no foundation in fact. The stories were probably the concoction of prejudiced persons who were no doubt influenced by the presence of women at the meetings.

Places known as sikrána are set apart for the performance of sikr. The sikrána is not built in any particular fashion

but consists of an ordinary dwarf-palm hut in the villages or Population. of a separate gidam among the nomad encampments, which is set apart for the purpose. The door does not face to any particular point of the compass. The only difference in the burial of the Zikri dead from the customs usually in vogue among Musalmans is the omission of the burial service. Zikri mullás exercise much influence, and in their capacity as religious preceptors they have frequently been known in the past to take an unfair advantage of members of their flock.

Under the existing administration the Zikris suffer from various disabilities and many of their rites have to be carried out by stealth. No attempts are made at proselytization. and there are signs that the faith is on the decline. The reason appears to lie partly in the general progress of the people in knowledge and a proportionate diminution in the influence of the mullás, partly in more frequent contact with the orthodox tenets of Islam and partly in marriages with Sunni women.

The whole population may be divided into five classes Occupation. by occupation: landowners, cultivators, flock-owners, seafarers and fishermen, and artisans. The landowners are the Landowners. least numerous class and consist of the dominant races and the better class of Baloch. They include the Gichkis, Naushérwánis, Mírwáris, Bízanjau, Rinds, Hots, Raís, Lundis, Kattawars, Kénagizais and Mullázais. Their lands are cultivated by tenants or hired labour. The dominant classes collect revenue from their lands in addition to the proprietor's share of the produce, that is, rents.

The cultivators are the most numerous class and a few of them possess lands of their own. The principal groups so engaged include the Darzádas of the Kéch valley, who are generally cultivators in irrigated lands; Dashtis, Lattis, Bizaniaus, Rinds, and Hots and others in Dasht; Band, Jadgál. Puzh. Wádéla and Sangur in Kulánch; Kolwáis, Bizaniaus, Sangurs, Mirwáris and Rakhshánis in Kolwa; and the Nakíbs, Barr, Kasháni, Shambézai and Singozai of the Panigur valley. With the exception of the Nakibs and Darzádas, the rest combine flock-owning and transport with cultivation as they generally hold only dry-crop areas, the supply of water for which is exceedingly precarious.

Cultivators and flock owners.

POPULATION.

The flock-owners consist of the Koh-Baloch, who are included in the following of the Naushérwánis; the Sámi Baloch included in the following of the Gichkis; the Kosag, Lagor, Gurgnári, Sájdi and the majority of the Sangur. Some of them are, however, now (1904) adopting agriculture as their principal pursuit.

Sea-faring classes.

The seamen and fishermen are divided into two classes known as Kora and Méd. The Koras or Lángas are said to have derived their origin from freed or unfreed slaves of the Kalmatis, who in former days employed them in their piratical enterprises in the Arabian Sea. These Koras are enterprising fellows, making their way in native crafts to Basra in the Persian Gulf and sometimes so far afield as Colombo and Zanzibár. The Méds follow their occupation of fishing in close proximity to their homes except in winter when they go to Gazdán near Pasni. A full account of the fishing industry will be found elsewhere.

Artisans.

All the artisans except weavers and potters are drawn from among the Loris. The weavers and potters are Darzádas and Nakibs but the weavers have fallen on evil days since the advent of European manufactured cloth and none are now to be found in Panigur, where previously thirty families were employed. The artisans are dispersed throughout the country and attached to different tribes and localities. They are seldom paid in cash, but are generally village servants and paid in kind on a system known as rasm. With the exception of the Loris their occupation as artisans is generally followed as subsidiary to that of agriculture. Bricklaying is generally done by people from Dizzak. The spare time of the women of the poorer classes is largely employed in the manufacture of woollen articles and the men are in many cases dependent on their earnings. They also sew clothes, grind grain and do other menial work on wages besides helping their husbands at the harvest.

Social life and social precedence As in other parts of Baluchistan great stress is laid in Makran on social precedence, and two factors are observed for the determination of relative precedence. These are the giving of a daughter in marriage to a certain person or group, and the right to the receipt of the salutation and news known as *cheh habbar*. The first is the test of the social equality or otherwise of groups or persons, but the second,

cheh habbar, is the test of racial superiority. The giving of POPULATION. a daughter in marriage is not, however, in the opinion of local wiseacres an absolute test as the girls must be given husbands, and as it sometimes happens that a husband is not available within the girl's own group she has to be given to a group lower than her own. For instance the Gichkis will never admit that the Bizanjaus, Muhammad Sanis or Mírwáris are their equals but they give and take daughters in marriage from them. Or again women are given in marriage to men who have acquired wealth and power like the late Mír Fakír Muhammad Bízanjau, the Khán's Náib of Kéch.

In every assemblage of Makranis the true test to social rank is the right to take the news. As the greatest importance is attached to the salutation, it will not be out of place to describe it at some length. All the boys among the dominant races and among the Baloch are taught the rules of taking the news very carefully and so jealous are the holders of their rights that lives have been lost in the past in defence of them. Cheh habbar literally means "what news?" Whenever a new comer arrives in a place where members of different races and groups are assembled, he offers the salám alaik, 'peace be with you,' and he is answered only by the person who is of highest rank. The latter first says alaikus salám, 'peace be with you,' and adds wash-aht, 'welcome.' The other persons who are present next welcome the newcomer and this done the highest in rank asks permission of all those present collectively to take the news. All reply Ji in token of assent. If speaking to a common Baloch the questioner says, habbar deh; to a man of the middle class he says, ahwal-kan; to an equal or superior, mehar-báni-kan. The highest in rank among the newcomers, if there are several, thereupon asks permission to give the news, and does so on receiving an affirmative in the reply. A Gichki of Kéch, Gichki of Panigur, Naushérwáni, Mírwári or Fakír Muhammadzai (Hammalári) Bízanjau is the cheh-habbar-é-wája, the "Lord of the news," among all the Makranis in the order named. A Gichki, whether high or low, rich or poor, chief or not, is supposed to take the news of all, but in practice Gichkis other than the sardár, allow the chief of the Naushérwánis

POPULATION. and others, if older, to take the news. Among the Baloch the Kalmatis, Kauhdáis and Shehzádas are deemed of equal rank, the news being taken by the oldest, if there be no Saiad or mullá present. A Saiad or a mullá, even if the latter be a Darzada or a Lori, takes the news if there be no Gichki or other member of the dominant races present. Nowadays the Gichkis even give way to a Saiad owing to the spread of the latter's influence as in other parts of Baluchistán. After the Kalmatis, Kauhdáis and Shehzádas, the news is taken by the Isazai Hots of Gushtang; then by the kauhdá of Dasht, a Ghulámsháhzai of Arab extraction; next by the kauhdá of Kulánch, a Wádéla; next by the kauhdá of Nigwar, a Kauhdái. Next follows the headman of the Rais of Turbat, a Músázai, and of the Sangurs who have equal privileges, the oldest taking the news and after them the Lundis and Kattawars. Among the democratic Rinds the right of the cheh-habbar belongs to the oldest. Among the Baloch of Panjgur the Kénagizais Mullázais and the Barr and Kashani kauhdas are considered to be equal in rank and status, and the right of cheh-habbar belongs to the oldest. These four are also admitted to be the equals of the Rais of Turbat and of the Lundi, Kattawar, etc., of Kéch.

Custom of nospitality.

Hospitality is confined to the chiefs and richer men among whom the custom is regarded as a duty rather than a virtue.

The people of the country generally are not hospitable owing to the extreme poverty of the majority. The middle classes for the most part live in permanent villages, where their hospitality is confined to friends and acquaintances from whom they, in their turn, experience the same treatment. A kinsman goes to the house of his nearest relation. who entertains him for two meals. Any other relatives who may be in the place, next entertain him for two meals each and also the neighbours of his first host, after which he returns to the house of the original host. A stranger is entertained by the headman of the village or encampment. A guest on first arrival is given all necessaries such as a bed and bedding or, if these are not available, a mat to sleep on and two meals. Afterwards he makes his own arrangements.

When a guest cok or in Sto undertaken is that or wash-aht or welcome. After a guest The etiquette of position has arrived and been welcomed a host sends a bed or mat as a sign that the newcomer is to be entertained. Shortly afterwards the host accompanied by relatives or friends visits the house set apart for the guest and takes the news. If he does not come his hospitality is not accepted. Other visits follow and after a time the host sends dates and curds, if available, or otherwise dates and water. This is followed after an hour or so by a meal befitting the guest's position and rank. No chief nor Baloch who has any pretensions to respectability, ever travels alone, but every one, who can possibly manage to do so, takes two or three companions, as a mark of his importance or social position. The Baluchi proverb: "a single mat is carried away by the wind" illustrates the feeling of the people on the subject and a person without a following carries little or no weight.

> Co-operation among individuals or groups.

of enter-tainment.

It is customary for Makranis to raise subscriptions among themselves on certain occasions, the system being known as bijiár. Bijjár is raised on the occasion of marriages (súr). circumcisions (burruk), the destruction of a house by fire (ás), and when fines (malám) and compensation for blood (hún) have to be paid. The person concerned visits his relatives, friends, fellow tribesmen and even strangers in some cases and solicits assistance which is given in the shape of cash or animals such as sheep and cattle. The contributions thus made are entirely voluntary, but there is a tendency in some cases for this voluntary character of the custom to be lost sight of, and for the rich and powerful to demand bijjar from their poorer brethren as a right. When a death occurs it is usual for relations, neighbours and friends to bring a gift with them on coming to pay their condolences to the relations of the deceased. Such gifts are called langari, starvation subscriptions.

If there happens to have been drought in one locality and rain in another, the ordinary Baloch and even Baloch of status make their way to the latter, where their friends or relatives and also the chief and other Baloch of rank give them grain doles according to their means to enable the POPULATION.

ing for such doles

is called *pindag*, i.e., begging. The poorer Baloch and lowest classes also receive two handfuls of grain from each harvest, a system known as *chankok*.

Manner of spending day by a headman, cultivator and shepherd. Excepting the shepherds, Makránis, as a whole, lead an idle, easy-going existence. A universal characteristic is the mid-day sleep which every one enjoys from 12 to 3 o'clock, be he chief, cultivator or flock owner. Another feature of the social life consists in the daily meeting (diwân) held morning and evening by the headmen of each community.

A chief or headman rises early and after offering his prayers takes breakfast (harzband). On emerging from his house he takes his seat under the shade of the tree which by ancient custom has come to be regarded as the meeting place of the village and here he is joined by other idlers until by 10 o'clock a fairly large gathering has assembled. The weather, crops, local politics, old fights and other subjects are discussed till mid-day when every one retires for his siesta till about 3 p.m. when another meal is taken and diwan is again held till the call to evening prayer. Now and then a visit is made to the fields to see how the crops progress. The household work is done by girls of servile origin and the cultivation by tenants or dependants.

The cultivator is busy only at seed time and harvest, especially in large khushkaba tracts where no weeding is done. The interval is spent like the chiefs and headmen. A cultivator, who owns irrigated lands, attends to his fields daily, does weeding when necessary, and looks to the repairs of his fences. But the cultivator is not idle even when he attends the village meetings, for if his tongue be wagging, his hands are busy in spinning goat hair or wool or making palm leaf sandals or mats.

The shepherd's life is spent in one monotonous round. He leaves the village before dawn with his flock to wander over hill and dale. When the pasture near the village is exhausted, he is sometimes absent from the village or encampment for weeks or months, merely returning to replenish his supply of dates which he largely supplements with milk from his animals. He sleeps in the

midst of his flock or in the light shoulder, se by, and is POPULATION. ever on the watch against the attacks cloth, which mals. only relaxation is playing his reed pipe (n). To the

Food.

Four meals are taken daily by the majng, double people which may be designated breakfast (harsbana), runch (nahárí or subárag); the afternoon meal (némrozai), and dinner (sham). Breakfast is taken immediately after rising; lunch at about mid-day; the afternoon meal between 3 and 4 p.m.; and dinner after sunset. For the afternoon meal, which is a light one, every one consumes dates. Breakfast and lunch in the case of the majority of the people consists of dates washed down with water or milk: for dinner judr cakes are eaten. A shepherd will sometimes consume dates for weeks together with all three meals. Boiled fish is taken by every one whenever obtainable, the gravy being sipped with the dates and the flesh being eaten at the end of the meal. The poor seldom see meat of any kind. the wealthy the use of rice for breakfast is common, and wheat cakes are substituted for the date ration at lunch and dinner. A man of substance will also eat meat frequently with all three meals, but he has a special preference for fish. extensive consumption of dates has been indicated by the above remarks, and they may be regarded as the staple food of the population. It is no uncommon thing for a hard worked Zangi or Baddi to consume 2 seers at a sitting, and stories are told of men who have eaten 5 or 6 seers at a The date is considered the choicest kind of food and very invigorating, and a supply of it is the only provision taken for a journey. A taste for dates and fish is quickly acquired by strangers, and the subject forms a standing joke against the Bráhuis among the indigenous population. When a Bráhui first comes to Makrán, he is said to turn up his nose at both, but after a few days he sticks fish in his turban and carries dates in the trousers of his uniform.

Juári (locally known as surrat) comes next in importance to dates as a food. The flour is ground by the women in handmills, and made into a thick paste with water when it is baked on a stone griddle. The same process is followed with rice which is of poor quality, and consequently seldom boiled whole. The consumption of wheat flour is small and the cakes made from it are generally eaten unleavened every-

POPULATION. where except slder, to take timakrani prefers his dried fish boiled, but idag, i.e., becaun to eating it raw, a habit which is attributed receive achthyophagoi by Arrian. The meat of fowls is known commonly eaten, but rich men kill goats and sheep occasionally for the entertainment of their guests.

> The well-to-do keep cows, but the majority of the people depend for their supply of milk on goats and sheep. The milk is generally taken raw or as curd which is prepared with a piece of copper or silver, alum, panér-bánd (Withania coagulans), or rennet extracted from the stomach of a kid. Butter is made from curd in a churn made from a leather skin (hinsak); cheese by extracting the moisture from the curd. Whey is boiled and the residue, after evaporation, made into shildnch. The biltong which is so common in the upper highlands is known in Makrán as tabdig, and is seldom made except by the wealthier people of Panigur.

The condiments in use consist of such articles as turmeric, the seed of the sour pomegranate, tamarind, and pepper. With the exception of the tamarind all the others are pounded, made into cakes and dried for ready use in stews. The better classes also use ghi in stews. With the exception of onions, which are generally eaten raw, the garden vegetables common in India are practically unknown. The people, however, are fond of vegetable stews made from beans (bdnk lénk) and pulse (masur). In Panigur turnips boiled with dates are regarded as a great luxury. Among wild plants which are used as vegetables may be mentioned sorichk which grows chiefly along the coast; shagoshag which is very popular; apútag which grows after rain at the root of the dwarf-palm and is consumed in very large quantities; indar-káh (Trianthema pentandra) which is only eaten by the poor in case of great necessity and gurágpad (Malva parviflora) which grows in abundance in places reached by the river floods. The last is only eaten when nothing better is procurable.

Dress.

The ordinary clothing is poor in quality and consequently cheap. A landholder wears a muslin turban about 10 yards long and of double width, costing Rs. 2-8-0, generally tied over an Afghan peaked cap (kulla); a short shirt reaching to the knees and made of 5 yards of white long-cloth costing DRESS. 129

Rs. 1-4-0 and buttoning on the right shoulder, and baggy Population. trousers made of 31 yards of the same cloth, which is sometimes dyed black or blue, costing R. 1-0-0. To the above is added a wrapper (chddar) of thick sheeting, double width for winter wear, costing Rs. 2, and of single sheeting for summer wear, costing R. 1-0-0. A flock owner or tenant wears a shirt and trousers, and in winter a small turban tied round a small round embroidered cap with a wrapper. All are made of cotton and cost about Rs. 3-0-0. thinly woven overcoat of dark wool (shal), sometimes profusely embroidered, which lasts for many years and costs from Rs. 1-8-0 to Rs. 3-0-0 is worn as a protection from rain or cold. A herdsman or servile dependant possesses only trousers, a small piece of red cloth for tying up his hair and a wrapper, the whole costing Rs. 2-8-0. To this sometimes is added an overcoat. The uses of the wrapper (chádar) are many and various; it is used as a towel, waistband or head-dress and for tying things up to be carried. A landowner wears shoes, price Rs. 2; others wear palmleaf sandals (sowás), which they make themselves. He wears his hair long, but the fashion of cutting it short over the nape of the neck in the Afghan way is spreading.

A woman's dress is simpler than a man's, but its quality is generally better. The use of the long shift (pashk) reaching to the ankles and of the wrapper (chádar) is universal; drawers, which are a recent innovation, are only worn by the better class women when going out. To protect the wrapper from becoming soiled a short silken scarf (gushán) is tied over the hair. The shifts and wrappers of the better classes are made of silk and the former are profusely embroidered in front. Among the poorer classes a single silken shift is given by the bridegroom to the bride at the time of marriage, and for ordinary use she has a shift without embroidery, generally made of red or blue coloured cotton cloth or of spotted or variegated chintz. One shift and wrapper will carry her through a number of years. Her hair is divided by a parting which reaches from the forehead to the nape of the neck, and the hair is then made to bunch in horns on the top, and at the side of the head and afterwards woven into two plaits which are joined at the back. The higher the horns (mut or shah) the more fashionable is

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POPULATION, the possessor. A profusion of hair is considered a mark of beauty.

Dwellings.

The nomadic population lies throughout the country in the tents known as gidám. They are generally made of matting stretched on poles for summer and of goat hair blanketing for winter. The latter are more numerous in northern than in southern Makrán. In southern Makrán the dwellings of the settled population generally consist of a wooden frame-work, covered with matting (log) and lined with grass, dwarf-palm leaves and tamarisk. In Panigur, owing to the cold, many of the houses are made of mud, but the poorer classes retain the mat hut which is sometimes, however, lined with mud. In former days the habitations were always constructed clustering round the forts of the headmen, and no one was allowed to live in any thing but a mat hut which could be easily removed in time of danger. The introduction of greater security has, however, within recent times, resulted in the erection by well-to-do persons of many buildings of sun dried bricks. These houses consist of a single-storey with a flat roof and containing two or three rooms. No verandah is built, but a large open space in front of the house is enclosed by a mud wall or an ordinary fence. They cost about Rs. 60 to Rs. 100, as the material and labour is generally obtained free of cost.

Most of the roofs of the mat huts are pointed at the summit (kargin), but others are elliptical (har-pusht) and dome-shaped (tuppu), the latter being especially noticeable In tront of the dwelling is a big yard with a mat or date palm fence. The matting of the hut is rain-proof and so strong that it lasts for fifty or sixty years, and the people say that a bullet from a matchlock cannot pierce it.

Disposal of dead.

The method of burial usual among Muhammadans is in vogue, the body being laid north and south with the head inclined to the west. The Zikris follow the Muhammadan method, but omit the namás-i-janása or prayer for the dead. The mourning is kept up for three days after death in the case of a person over seven years old, during which time visits of condolence are received and prayers are offered for the soul of the deceased. The men take off their turbans and wear a sheet hanging on either side of their Baluchi cap, while the women divest themselves of all their orna-

AMUSEMENTS.

ments except the nose-ring and wear black drew the coming from a distance to condole with the reidárk deceased are entertained by the latter. the case of a child under seven lasts only for one way, cance

The wandering Loris and nomad Baloch, when away fre a centres of population, and unable to procure shrouds, bury the dead man in his clothes. The Méds will never take a corpse through the door of the house but break down a portion of the mat wall large enough to allow its exit.

In-door games, which are numerous, include one called Amusements chauk, known in India as chaupat or chausar, which has been introduced from Sind. It is played by four players on a cloth worked in squares and with wooden men. are regulated by six or seven cowries which are thrown on the ground together as dice. Other people, who have never been out of the country, prefer a more homely game called Hashtán chauki, which is played by men on a system somewhat similar to that of draughts, knuckle bones being used as Boys are fond of playing knuckle bones. The Méds of the coast all play the games of cards which are common in India without stakes, except on the occasions of the Id-uz-zuhá and Id-ul-fitr when men, women, boys and girls all play for stakes. This has now (1904) been prohibited by the Administration on pain of heavy fines.

li, a kind of prisoner's base, is the most popular of outdoor games, and regular matches are arranged and played by the young men and boys of the villages in the evenings Wrestling and racing are also or moonlight nights. favourite pastimes among the lower orders. The Méds hold boat and swimming races. Coursing and shooting are in vogue among the dominant races, but the Baloch excel them in skill at both these pursuits. The Méds are the best wrestlers and excel even the Darzádas in feats of personal strength.

Little attention is paid to festivals, even to those usually kept among Muhammadans, and no large assemblies take place at shrines or other places. Sometimes a chief or a Baloch of the better class holds a dance (chámp) on the night of the Id, when the dancers are furnished by the Darzádas, Nakíbs, servile dependants and Loris. A huge fire is lighted, round which the dance is performed to the festivals.

MAKRÁN.

irum and surna. The women of the lower e to be seen in the background enjoying the fun.

The nomadic other festival of importance is the Zikri the terat Lan-è-Murad which takes place on the occasion mat the *Id-uz-suha*. Owing, however, to the influence of Muhammadan officials it has been discontinued for the last few years, and the pilgrims only come in small parties and depart unobtrusively after performing the usual rites.

Names and titles.

Immediately after birth, a name of endearment is generally given to the child which he carries till he becomes of age. Such are pullen (flower), gosho (long-eared) and pullo Within the first week the child is also christened with a name which is used after the attainment of manhood. Some of these names are those usual to Muhammadans such as Pír Muhammad, Gul Muhammad, Kamál Khán, Mehráb Khan, but most of the Baloch possess names which are possibly of totemistic origin, such as Kahúr (Prosopis spicigera), Chagird (Acacia arabica), Kunar (Zizvphus jujuba), Suhél (Canopus), Gorich (North-wester) and Mazár (Lion). Names peculiar to the Baloch include Lalla. Bijjár, Kannar and Jíhand. Much confusion is caused by the custom of giving a grand-son and grand-daughter the name of the grand-father or grand-mother. Corrupted and vulgarised forms of names are common, especially among the lower classes, e.g., Pirak for Pir Muhammad, Shéro for Shér Muhammad, Dostú for Dost Muhammad and so on. In stating his name a man will generally give his name together with that of his father for purposes of identification. He will also add that of his clan, section or sub-sec-Such names are formed by the addition of the suffixes sai and ani to eponyms. The adjuncts usually used with the names of women are khátún and bíbi, e.g., Roz Khátún and Bíbi Mahdém.

The suffix khán is generally reserved as a title of courtesy for members of the dominant groups, and the Baloch do not assume this title. Members of the upper branches of the dominant races also prefix the word mir. The use of sardár is confined to the holders of the office of head of a tribe, though it is loosely applied also to others as a matter of courtesy. The only sardárs officially recognised are the Sardár of Kéch, the Sardár of Tump and the Sardár of Panjgúr.

It is usual to distinguish a large landowner by the addition POPULATION. of his place of residence as Mír Kamál Khán, Pídárk-é-Wája. i.e., Mír Kamál Khán, laird of Pídárk,

Among titles which are used with a religious significance may be mentioned sheh, i.e., shekh which is applied to a convert to Islam and specially to the converted Gichkis, Sheh Omar, Sheh Kasim, Sheh Lalla, Sheh Muhammad, etc. Fakirs and anchorites are also called sheh, but as a distinction the name of their tribe or denomination is added thus: Sheh Kahéri or Zikri Sheh Sáhib or sáhibzáda is peculiar to Saiads or persons claiming direct descent from the Prophet. Mulld is a much coveted title, and is assumed by any one who has read the Korán, though he may not be able to understand it or write Persian; the term is also applied to the priests of the Zikris. Ustáz (Persian Ustád) is a term peculiar to the Zikris, and is applied to a mulld who may bring a Zikri child into the fold, by which act he is considered to become the child's religious preceptor.

A knowledge of the rules of honour (mayar) prevailing among the people is not without importance from the point of view of the administration and a short reference to them will not be out of place. It is incumbent on a Makráni-

- (1) To avenge blood.
- (2) To fight to the death for a person who has taken refuge with him. The refugee is called báot and is always maintained by his protector so long as he remains under the latter's roof.
- (3) To defend to the last property entrusted to another such as a bullock, camel, cash or ornaments.
- (4) To be hospitable and to provide for the safety of a guest.
- (5) To refrain from killing a woman, a Hindu, a Lori or a boy under the age of puberty.
- (6) To pardon any offence if a woman of the offender's family comes to intercede with the person aggrieved.
- (7) To refrain from killing a man who has entered a shrine of a pir and so long as he remains in it.
- (8) To cease fighting when a woman bearing the Korán on her head intervenes between the parties.
- (9) To punish an adulterer with death.

Rules of honour.

POPULATION. System of reprisals. Blood can only be avenged by taking the blood of the offender, but if the offender himself be out of reach, his nearest relation, viz., his brother, father, or cousin is slain. Such a system is soon liable to extension with the result that the life of any member of the offender's tribe is taken, and so a blood-feud, unless nipped in the bud, develops by leaps and bounds until either the authorities or friends intervene and the parties are induced to arbitrate. The losses on either side are then reckoned up, and if numbers are equal, compensation is paid to the side which lost the last man (gud-jang) at the rates mentioned in the paragraph on blood compensation. If, however, one side has lost more than the other, compensation has to be paid for the balance of lives at the accustomed rates.

Blood com-

No rate appears ever to have been fixed for blood compensation on the death of a Gichki or other member of the dominant classes. The fact is that no Baloch ever dared to attempt the life of any of them, while if one of them happened to be killed in an intertribal fight with one of the other dominant classes, his heirs took as compensation what they were able to get at the point of the sword. Thus the whole district of Sami formed the blood compensation of Mar or Man Singh, Gichki, while the whole of the possessions of the Mirwaris in Kolwa were handed over to the Naushérwanis in the blood compensation of Mir Lalla Naushérwani.

The degraded position of the Baloch may be gauged from the fact that up to 1899 the heirs of a Baloch could not claim blood compensation against any of the dominant races, nor could a Baloch offer asylum to a refugee (báot), nor in case of the commission of adultery by one of the dominant classes with his wife could he obtain lai, i.e., compensation for violation of honour. In January 1899, however, an agreement was signed by all the Gichkis and other headmen of Kéch and attested by the Political Agent, Kalát, in which they agreed to pay blood money for a Baloch at the rate of Rs. 1,500, while the fine to be paid to the Government in ordinary cases was not to be less than Rs. 500. It is said by the people that Colonel Reynolds, when Political Agent in Southern Baluchistán, only fixed the amount of blood money for a Baloch at Rs. 200, and if this is true, the new rate of compensation is extremely advantageous for the

race which forms the majority of the population of the POPULATION. country.

In other cases the following rates are recognized as far as can be ascertained: -- for a Baloch of the better class, 12,000 zarr or Rs. 3,000; for an ordinary Baloch, 8,000 zarr or Rs. 2,000; for a Darzáda 6,000 zarr or Rs. 1,500; for a Sarmastári Lori 14,000 zarr or Rs. 3,500; for other Loris 8,000 zarr or Rs. 2,000; for Méds 2,000 zarr or Rs. 500; for servile dependants double his price, i.e., about 800 zarr or Rs. 200. One-third of the amount is generally paid in property, one-third in cash and one-third in weapons on which a fictitious value is placed. It may be noted that the rates given for the Loris are those stated by the Loris themselves and are probably exaggerated, but at the same time it is to be remembered that throughout Southern Baluchistán the Baloch code of honour forbids the killing of a Lori, a fact which would account for the enhanced rate. Serious injuries, resulting in the loss of a limb, are generally compensated at half the full rates.

Kauhdá Kénagi, Ghulám Sháhzai, lives in Kohak, one of the réses of Dasht. His ancestors migrated to Makrán from the coast of the Gulf of Omán, some ten generations back, and after living for a while in Dasht, acquired the office of kauhdá. The kauhdá of Dasht takes precedence among all the supporters of the Sardár of Kéch, a position which is indicated by his taking the news from all Baloch, whether headmen or others in Kéch. He also possesses the right of appointing the Sub-kauhdá of the various réses in Dasht. The kauhda of Dasht possessed great power and influence. in the days of the Gichkis, and with the kauhdá of Kulánch on several occasions offered an effective resistance to claims against their people put forward by the Gichkis and by the Khan. The present kauhda is a quiet, inoffensive individual, about thirty-two years of age. He holds his lands revenue-free and receives an annual allowance of Rs. 80 out of the garr-é-shah collections from the Dasht réses. Kénagí's father, Nabi Bakhsh, was a friend of Major Mockler and Sir F. I. Goldsmid and rendered them much service and He also helped Col. Macgregor in 1877 in spite of the protests of Mir Fakir Muhammad Bizanjau, the Khán's náib, and of Mír Báián, the Gichki Sardár of Kech.

Leading families. Kauhdá Kénagi, Ghulám Sháhzai. Population.

Mullá

Mubárak

Wádéla.

Mullá Mubárak Wádéla is the principal kauhdá or headman of Kulanch and a Mengal by origin, his ancestors having migrated from Wad. He lives at Nokbur and is one of the most influential men in Kéch. He is married to the daughter of Mullá Khudádád, headman of the Rais of Turbat, who in his turn married Mullá Mubárak's mother on her first husband's death. These two men were largely responsible for the troubles which took place in 1898 and were among the chief advisers of Mír Mehráb Khán Gichki. Mullá Mubárak holds his lands revenue-free both from the Gichkis and the Khan in virtue of his position and of the assistance he gives in collecting the revenue of Kulánch. He also receives an allowance of Rs. 40 per mensem from the Makran revenues. He is about fifty years of age. ranks next to the kauhdá of Dasht and is the second of the supporters of the Sardár of Kéch.

Mullá Dád Karím, Mullái.

Mullá Dád Karím, Mullái, is the son of Mullá Rahmat, who was the right hand man of Sardar Mir Baian Gichki, and expelled Shághási Attá Muhammad from Kéch about thirty-five years ago. Mullá Dád Karím is the head priest of all the Zikris of Makran, and as such exercises great influence among his followers. His father, Mulla Rahmat, has been canonized in the Zikri calendar. Dád Karím is peacefully inclined, but a designing person in his place might cause considerable trouble in political matters. He lives with fourteen other families of Mullais in Kallag in Kulanch, and makes an annual tour, during which he realizes sufficient to maintain him in comfort and respectability during the year. and his section style themselves Saiads and trace their origin to Imam Husain. During the rule of the Bulédais the Turbat fort is said to have been in their hands, and the presence of so many Zikri remains in the vicinity of Turbat renders this story not improbable. At the end of the eighteenth century they were ousted by the Gichki Sardár, Sheh Omar, who ultimately met his death at the hands of Mullá Rahmat, who has already been the Zikri sect. mentioned, again possessed himself of Turbat later on, but was expelled by Mir Fakir Muhammad Bizanjau, the Khán's náib, from 1843-4 to 1883-4.

CHAPTER II.

ECONOMIC.

THE general idea of Makrán as an arid, dreary, uninviting waste, in which the armies of Semiramis and Alexander were practically annihilated, is not borne out by the facts of the twentieth century. The fact that numerous traces of irrigation works still exist throughout the country, even in tracts which are now dry crop areas, and the circumstance mentioned by Idrisi that sugar was grown in the country and that silk was produced in exportable quantities, indicates that Makrán enjoyed in the past a high degree of agricultural and commercial civilization. In spite of the vicissitudes through which the country has passed, and of the centuries of bloodshed and strife to which it has been subjected, each change dealing a further blow to its agricultural prosperity, the country can even now compare favourably with the most favoured parts of Baluchistán as regards agriculture. Its chief drawback is the thinness of its population; cultivators are scarce rather than cultivable lands. in other parts of Baluchistán, cultivation is dependent either on the rainfall and the floods caused thereby or on permanent irrigation which covers a fairly large area. According to the local authorities the irrigated area stands to the dry and flood crop area in the proportion of 1 to 4, but if all the repairable kárézes and other sources of irrigation were utilised the irrigated area could be very largely extended.

Another means of restoring the agricultural prosperity of the country appears to lie in the conservation at some future time of the vast quantities of flood-water which are now carried off to the sea; and places are not wanting where large schemes could be carried out. AGRICUL-TURE. General conditions AGRICUL-

Travellers have noted that the sub-soil of Makrán appears to be specially adapted for retaining moisture and the rainfall is looked to, not only for rain and flood crop cultivation, but for replenishing the supply of water in the káréses and kaur-jos*, from which most of the permanent irrigation is derived. If successive years of drought occur, the people fall back on their flocks and herds, as they are not so prone to migrate as elsewhere in Baluchistán.

The soil of the khushkaba tracts is very rich and, in the eyes of the Makránis, not inferior in any respect to that of the Kachhi and Béla plains; but that of the irrigated area has become extremely poor from continuous and constant cropping and the plantations of date trees on every field which not only shut out the sun and air from the fields but also divest it of many of its best properties. The proneness to date-planting among the Makránis is one of the most interesting circumstances connected with the cultivation of the land. The date is their staple food and they care little for grain so long as they can get dates to eat.

oil.

The people divide the different kinds of soil in the country into different categories in dry crop and irrigated areas. Those best known in the former are milk and mat, and in the latter rék and sawár, dal or dalo and sorag.

Milk.

Milk is a white soft clay brought down from the hills and deposited by the streams and hill torrents. It is considered the most fertile and richest soil in Makran and is fit for all kinds of grain crops, especially for wheat and barley. The soil of most of the large khushkába tracts in Makrán, such as Dasht, Nigwar, Kulánch, Kolwa, Bálgattar, Parom, Shahbánz, Gichk and Rakhshán, is milk. It is so soft and friable that a man sinks into it while crossing a field after it has been ploughed; hence it allows the water to sink into it easily and is very retentive of the moisture afterwards. does not crack or harden and is superior to the alluvial soil of Kachhi in its soft and yielding character. It gives large produce with comparatively little seed. There is another kind of milk which is known as gach and is deposited by those streams and torrents whose course lies in the white clay hills, which form such a characteristic part of Makrán

^{*} An open water channel drawn off from the pools in the beds of the rivers.

SOIL.

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scenery and are called shur; hence the colour of the deposit is a bluish white. Unlike milk, gach becomes hard and uncultivable after two or three years of cropping and has then to be left fallow for two or three years, during which time some process takes place which renders it again cultur-This is one of the causes necessitating land being left fallow in the khushkába tracts especially in Nigwar. all the lands under Nokén ráh kaur which cultivates half the lands of the Mach-chát rés and also half of the Jat rés become uncultivable every three years. This is also the case with most of the lands in Kappar and Ban, two réses of Kulanch. Gach is to be found in almost all the Makran valleys but is not so extensively distributed as milk.

AGRICUL:

One of the peculiarities of gach is its hardening after being flooded after which large crevices form in it, through which the sun's rays penetrate and suck up the moisture. Very close sowing of cereals is, therefore, required to prevent the loss of meisture in the soil, but this in its turn lessens the outturn. Though not particularly suited to cereals, gach is well adapted to cotton cultivation, and cotton plants in gach soil are said to attain a more luxuriant growth than anywhere else.

Mat.

Mat consists of a thick layer of silt containing a mixture of earth and sand. It is liable to crack but, in spite of this drawback, is believed to be superior to the milk of dry crop areas owing to its fresher properties and greater productiveness. Lands which receive these deposits of mat once or twice a year are called bug, and most of them are to be found in Dasht and round Isai in Panjgúr. In the bed of the Rakhshán river large bug tracts are embanked in order to catch the silt, but this is not the case in Dasht. The Panjgúr mat lands are famous for their production of wheat, and those of Dasht for sohro, the name given to juári grown in dry crop areas.

Of soils in irrigated land, rék or sawár is composed of milk mixed with sand. It is called rék in Kéch, and sawár in Panjgúr. Most of the irrigated lands contain this soil. Rék is considered only inferior to milk as it takes the moisture easily and the sub-soil retains it well. Rice does well in rék, but it is not suitable for wheat which requires less

AGRICUL-TURE. moisture and a soil of better quality. Zurrat, the juari grown in irrigated areas, also flourishes in it.

Dal or dalo.

Dal or dalo is a stony soil composed of rubble and milk over a hard rocky substratum and is found in fields excavated in hill-sides and along the beds of the rivers. Artificial milk soil is sometimes made in gravelly lands by excavating the bigger stones and depositing milk brought from other places over the smaller pebbles which are allowed to remain. Of course this process is only undertaken where land is very scarce and water plentiful. Most of the land in the Zámurán kalags contains dal soil; as also do those on the banks of the Kéch river in Sámi and the tracts under the Uzzai and Káúsi káréses in Kéch proper. A good deal of land in Tump is also of this kind. Dalo is considered especially suitable to the cultivation of wheat and bánklénk (beans), for vegetables such as pindál (sweet potato), onions and for fruit and date trees.

Kork or rod.

Some parts of the country contain a soil which becomes peculiarly hard and almost rock-like, when exposed to the action of running water. In Kech such soil has received the name of rod, meaning copper, and in Panigur that of kork. This hard soil is not extensively distributed in Kéch, but a good many of the Panigur irrigated lands contain it. Its cultivation is not practicable unless milk is added to it after it has been dug waist deep. It soon deteriorates as it is impossible to put in sufficient milk, and consequently requires an enormous quantity of manure. The only reason why such lands are not entirely thrown out of cultivation appears to be that most of them are irrigated by kaur-jos, by which sufficient silt is periodically deposited to give the field a new Many of the gardens in Panigur are laid out in lease of life. such lands and surrat is cultivated under the trees.

Sorag.

Sorag is the name given to soil which is saturated with saline matter. Where no other land is available in irrigated tracts, sorag soil is rendered cultivable artificially by the application of a thorough manuring of cowdung. Any saline efflorescence on the surface is removed and water is then allowed to stand in the field until the properties of the cowdung are absorbed. Repeated applications of cowdung are made at each sowing causing a gradual increase in the fertility of the soil, until the saline matter altogether dis-

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appears. In the soil thus improved, the date tree does best, but it also suits wheat and rice. Zurrat never succeeds in it,

AGRICUL-TURE,

Among the soils of uncultivated areas are dåk, pat, kallar and kap. Vast tracts of dåk, consisting of stretches of hard, white bare clay, are to be found in all the wider dry crop tracts, seemingly absolutely flat, but in reality having a gradual and imperceptible slope towards a particular point towards which the surface water drains owing to their hardness. No moisture ever penetrates deeply below their surface and the water runs off towards the embanked fields which surround them. Dåk lands could easily be rendered culturable, but, owing to the extent of land available, it is not necessary to do so.

Pat resembles dák, except that it is softer and is covered with rank growth and pasture.

Pat.

Kallar and kap are soils which are more impregnated with salt than sorag. The largest tracts of kallar are to be found near the coast as at Kalmat and between Jiwnri and Gabd. Kap is peculiar to the basins of Kolwa, Balgattar and Parom, and produces a good quality of salt.

Conformation of surface and cultivation in relation thereto.

The country, as has already been explained, consists of a series of valleys, wide or narrow, each of which is known as a kúcha. This term has, however, also come to be used in a rather more restricted sense for those tracts which contain large khushkaba areas. Flood crop cultivation takes place below the stony slope which borders all valleys. If the valley is a broad one, the centre not infrequently remains uncultivated, as the water of the hill torrents, on which the lands depend for cultivation does not reach them. When rain occurs in the mountains, the surface water is brought to the valleys in torrent beds known as sheps. Each of these torrents as it debouches from the mountains and enters the plain, ploughs the soft soil into numerous small shallow channels which gradually deepen as they advance into the plain to where the fields are situated. These channels are called chil or dor, and form a great obstacle to travelling, long detours being necessitated to avoid them. Every chil irrigates several fields.

The scanty rain averaging a few inches is not sufficient to ensure cultivation without artificial assistance. The husbandman's return, therefore, is only assured where his AGRICUL-TURE.

Rainfall and humidity, etc.

cultivation is dependent on the karés or underground water channel, the spring or the kaur-jo.

The character of the two periods of rainfall bahárgáh and bashsham has been explained in the section on Physical Aspects. The bashsham or summer rains between the middle of May and the middle of September are far more copious than the winter storms, and not only the cultivation of the autumn but also that of the spring is made possible by its means. "Summer is the husband and winter the wife," "Summer earns and winter eats" are current proverbs which indicate the importance attached to the summer In dry or flood crop areas it is the custom to set apart certain lands each year for the spring crop and others for the sohre, or the autumn juári. The spring crop lands, if filled with water by the bashsham or summer rains, are ploughed immediately after the water has been absorbed, and smoothed over with the object of retaining the moisture till they can be sown at the beginning of the cold weather. If these fields receive a second watering from the winter rains, the produce is magnificent, and even if they receive no further moisture they produce a moderate crop.

The beginning of the bashsham season is heralded to the cultivator by the rising of the Pleiades, called paur, in the early morning. Rain is to be expected within five days, and if it does not come, he must wait twenty-five days for the appearance of Cassiopeia, called tirband, in the east. a little below the Pleiades. If rain still holds off, the next star he looks for is sál, and if his hopes are once more shattered he must expect and prepare for a year of drought. A copious winter fall can never compensate for a short amount in summer. The winter fall is principally useful for watering the spring crops sown on the summer rain and, if it arrives early, also enables a certain amount of spring crop cultivation to be done. It may be noted that the winter fall is, if anything, more abundant and useful on the west side of the country and that the eastern side, which appears to catch the skirt of the Indian monsoon rainfall, is more dependent on the quantity received in summer. Preceding and succeeding the bashsham period, the cultivator expects a first and a final shower known as tarápi or garr-áp. These showers are also called sar bashsham or the beginning

of bashsham and gud bashsham or the end of bashsham. The former falls between the 15th of March and the 15th of May, and the latter between the 15th of September and the end of October. They are very sudden and limited in extent, the sun frequently shining in one place while heavy rain is falling a short distance away.

The periods of continuous deficiency in the rainfall, which constantly take place, are a factor constantly to be reckoned with by the agriculturists, and towards the coast, periods of five years have been known to elapse without good rain.

From the above remarks it will be seen that the mountainous nature of the country and the insignificance of the rainfall are the most important factors in considering the system of cultivation. The hill torrents collect and pour their flood water into the valleys, by embanking which the cultivator is enabled to store sufficient moisture for sowing and afterwards for irrigating his crops. The floods too are a prominent factor in kaur-jo cultivation, for they hollow out and fill the pools from which the channels are taken off. Without floods the kaur-jos soon dry up and the water of kárézes too soon decreases in amount. Indeed local wiseacres assert, that the only kaur-jos in Kech, which can withstand two years of drought, are Chib and Bit kaur-jos in Buléda, the Sámi kaur-jo in Sámi, the Nokkash in Kaush Kalát, the Ginna and Kirmán-dizz in Kalátuk, and the Mír Isaijo in Tump.

Almost the whole of the population is dependent in some way or other on agriculture, the only exceptions being Hindus, Khojas and Méds. The people, whether high or low, man or boy, are essentially agriculturists and well versed in their business. The first enquiries made of every traveller, after the news has been given and received, are about the state of the crops. How are my beans? How is my wheat? What is the state of my date crop? And if twenty people are met in a day the same questions are asked from each.

The dominant classes and the Baloch in irrigated areas generally get their lands cultivated by the Nakibs and Darzádas. The Baloch largely confine themselves to the dry crop areas and add to this the profession of flockowning for which they exhibit a special tendency. Among them only

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System of cultivation in relation to rainfall.

Population engaged in, and dependent on, agriculture. AGRICUL-TURE. the Dashtis and Kolwais can be said to be expert cultivators. A Baloch proprietor who is well versed in agricultural knowledge, is known as a dehkán. The Darzádas and Nakibs are by far the most laborious tillers of the soil: in Kéch they are always to be seen looking to the fences of their fields (all irrigated lands are fenced), collecting manure, swarming up the date trees to impregnate the spathes, or collect the fruit, when ripe, watering the fields or watching the crops by night besides performing many miscellaneous jobs such as cleaning and repairing the kárézes and kaur-jos, excavating new fields and collecting dwarf palm for their landlord and grass for their bullocks. Under the directions of the Baloch proprietors, the Darzádas in Kéch are the life and soul of the irrigated cultivation. The Panigur proprietors are, unlike those of Kéch, very ignorant of agricultural lore, and in consequence everything is left to the Nakibs who not only supply the labour but the brains required for cultivation.

Seasons of the year, sowing and harvest.

The cultivator divides the year into four periods, by the sowing and cutting of the different crops. These are tuhm kishán or the sowing of the spring crop; jopág, the reaping and harvesting of the spring crop; karrái, the period for sowing the autumn crop, and ér-aht, the end of the date season and the reaping and the harvesting of the autumn crop. The time of tuhm kishán is determined by the rising of the constellation called Takht-é-Sulaimán (the Great Bear), and it only lasts for the months of October and November. On the first appearance of the constellation, embankments are repaired and ploughing begun. If tarapi showers fall, wheat and barley, which constitute the principal spring crops, are sown in Kéch in the first week of November when all the seven stars of the Great Bear appear in the evening. sowings can take place as late as the end of December. Kolwa and Panigur, owing to the colder climate, wheat and barley are sown in October, about fifteen to twenty days earlier than in Kéch, and the harvest is reaped about ten days The reaping of the spring crop (jopág) takes place between Zilhij and Muharram (15th of March to 15th of April).

The ordinary season for karrái sowings or the kharif crop is between the end of February and of March, but the principal autumn crop of sohro (Andropogon sorghum) is largely

sown in dry crop lands, and here sowings may take place at Agriculany time between the close of February and the end of July. whenever rain falls. The harvest is gathered from 90 to 100 days after sowing, and the latest sowings are reaped at the end of October, at the rising of Suhél, which heralds the close of the er-aht harvest.

This is the most anxious time for the cultivator whose liopes are centred in the sohro crop and the bashsham rain by which it is cultivated, for, next to the date, sohro is the principal staple food of the country. If by good luck his lands are filled by the sar-bashshám, he sows his crop and comes to Kéch to enjoy the ámén with a quiet mind, for he is certain of two crops from his single sowing. But if there is no early rainfall, he must stick to his land in the hope of a later fall.

In irrigated lands rice and surrat, the variety of Andropogon sorghum grown under irrigated lands, are sown immediately after jopág and are reaped at the same time as the gathering of the date fruit.

The following are the chief crops produced at each har-

Spring crop. (peshk	Autı	
Irrigated land. (1) Wheat. (2) Barley. (3) Bánklenk. (4) Lucerne (on	Unirrigated land. (1) Wheat. (2) Barley. (3) Arzun(Panicum milia-	Irri • la (1) Ric (2) Zu (3) Co sm
a small scale) (5) Niginz (Lens esculenta) (on a small scale.)	ceum.)	(4) Ga
(6) Tobacco (on a small scale.)		

-	(Garma kishár shár.)
Irrigated	Unirrigated.
· land.	land.
) Rice.	(1) Sohro, mixed
) Zurrat.	crop includ-
Cotton (on a	ing :-
small scale.)	(a) Sohro (And-
) Garden and	ropogon
vegetable	sorghum.)
produce.	(b) Másh (Pha-
	seolus mun-
•	go.)
	(c) Parmásh
	(Phaseolus
	aconitifo-
	lius.)
•	(d) Mák (Zea
	mays.)
	(e) Melons.
	(f) Water me-
	lons, and
	(g) Cotton.

AGRICUL-TURE. Agricultural calendar.

The Arabian calendar is followed in Makrán and the names of the corresponding months in the English calendar are those of 1903. The table exhibits the operations usually performed in each.

	English.	Vernacular.	Operations performed.
I.	January.	, Shawwai	A month of leisure. In irrigated lands fences of the fields, etc., are repaired. Embankments of unirrigated lands are repaired and fields ploughed.
2.	February	Zi Káda	In irrigated lands rice and surrat fields are ploughed, manured and prepared. If there has been rain, early sowings for the autumn crop take place in unirrigated land.
3.	March	Zi-hijja	The impregnation of the date trees begins; rice and surrat are sown. Reaping of the spring crop begins in irrigated and unirrigated areas.
4.	April	Muharram	The spring harvest completed; surrat* seedlings transplanted in Panjgur. The embankments of the unirrigated lands are repaired in expectation of the sar-bash-sham rain.

Transplantation of surrat seedlings only takes place in Panjgúr.
 In Kéch surrat is sown as any other crop.

English. Vernacular.
. May ... Safar ...

Operations performed. ... In irrigated areas the

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population goes into camp under their date groves to watch the progress of the date crop and attend to the rice, and surrat cultivation. In unirrigated lands the cultivator is busy with the sowing of Pashti or late kharif crop. Rice seedlings are transplanted.

6.* June ... Rabi-ul-awwal

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... From the 20th of June to about the end of October is the busiest time for a cultivator of irrigated lands both in Kéch and Panigur. He is occupied in gathering and storing the date fruit and harvesting the autumn crops. In unirrigated lands he is also busy in harvesting the autumn crops if there has been any rain; otherwise he lives in Kéch or Panigur, enjoying the ámén, engaged in the transport and bartering of fish for dates, etc., and manufacturing mats, sandals, etc., which he also exchanges for dates.

[•] The exact dates of sowing and harvesting the autumn crop cannot be given. Sowings of the autumn crop can take place at any time from March to July when rain falls, and the harvest takes place from 90 to 100 days later.

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TURE.	

English. Vernacular. Operations performed. 7. July ... Rabi-ul-ákhir ... Same as June.-The ámén or date harvest is in full swing. 8. August ... Jamádi-ul-awwal ... Do. September.. Jamádi-ul-ákhir ... Same as June.-Cotton is gathered in this month and rice is harvested. 10. October ... Rajab ... In irrigated lands the fields are prepared for the spring crop sowings, and unirrigated lands are ploughed in expectation of the gud-bashshám. Cotton gathering continues. 11. November... Shábán The sowing of the spring crop commences. Cotton picking is finished. 12. December... Ramazán Operations of previous month continued and finished. The busy season for the cultivator of unirrigated land lasts from February to September. No sooner are ploughing operations over in February than attention has to be paid to

The busy season for the cultivator of unirrigated land lasts from February to September. No sooner are ploughing operations over in February than attention has to be paid to the wheat and barley crop which is ready for cutting by the beginning of April. No sooner is this finished than some part of his mixed autumn crop of sohro, cotton, másh (Phaseolus mungo), parmásh (Phaseolus aconitifolius), mák (Zea mays), melons (Cucumis melo) and water melons (Citrullus vulgaris) is ready for garnering, and this continues till October with the exception of the cotton, picking of which continues till the end of November. In November the spring crop is sown and from this time the cultivator can rest to the following February. On the other hand the cultivator of irrigated lands is always busy, and when not engaged in the sowing or harvesting of his crops, he is busy in manuring, watering, or fencing his fields or, in the hardest

job of all, the repairing and cleaning of the sources of irrigation.

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Principal crops.

By far the most important crop of the country is the date, a detailed account of which will be found in a subsequent section. Among cereals, surrat, the local name for juári is of the first importance and is largely cultivated both in dry crop and irrigated areas, and of other food grains, wheat, barley and rice, come next in order. Except at Panjgúr, wheat is mostly sown in irrigated lands, but owing to the number of the date trees on such lands the produce is insignificant, and hence wheat bread is considered a luxury. It is only in unusually good years, which occur very rarely, that a harvest of wheat is obtained from dry crop tracts. Barley is grown everywhere in small quantities except Kolwa, of which locality it forms practically the only spring crop. Rice is grown only in irrigated lands in Kéch, Tump, Pidárk, Buléda and Panjgúr, etc.

No oil-seeds are grown except sesamum (kunchit) and this only in very small quantities and no oil is extracted from it. Of fibres, the only one plant grown is cotton.

Amongst the miscellaneous crops may be mentioned mash (Phaseolus mungo), parmásh (Phaseolus aconitifolius), mák (Zea mays), melons (Cucumis melo) and water melons (Citrullus vulgaris) which are grown in dry crop areas mixed with juári. A mixed crop is also obtained from irrigated lands consisting of bánklénk, and pindál (Ipomaea batatas) and nigins (Lens esculenta). Little attention is given to vegetable cultivation; a few pumpkins and brinjals being produced in Kéch and some turnips in Panigur but they are only grown for private use. Arsun is grown as a food grain in Kappar, a rés in Kulánch; elsewhere it is cultivated on a small scale as a fodder crop.

The generic term applied to Andropogon sorghum in Makrán is surrat, but the use of this word has gradually become restricted to that produced in irrigated land, while sohro is the word used for a different variety which is grown in dry crop areas. Zurrat is white in colour and the grain is bigger than sohro, but it requires a great deal of water; sohro on the other hand bears a reddish grain and requires ess water.

Staple-food grains, juári (local name zurrat or sohro).

AGRICUL-TURE. Dry cultivation. Repairs to the embankments of the sohro fields are begun as soon as the spring crop is sown. Embanked fields are called band and the embankments ispand. The embankments are made with the broad plank harrow shod with iron called arin or kén, $3\frac{1}{2}$ feet long and 2 feet broad. Some of the bands enclose large tracts of land and those in Kolwa and Kulánch especially are famous for the size of their embankments. Ploughing (shomag or langar kanag) follows; the clods are broken and the surface levelled with the help of the log called mars or málag, which is 6 feet long, I foot broad, and about 6 inches thick.

The cultivator now only has to await the rain or floods. If his embankments receive yak pur, i.e., one filling, he considers himself repaid for all his labour; if they receive do pur, or two fillings, he is more than repaid; but if the number of fillings reaches three (sehpur) all occurring at proper intervals his cup of good fortune overflows. Half fillings are termed kand-o-kabél, which means the watering of the depressions and trenches which lie round the fields at the foot of the embankments. If the field is filled to three-quarters, it is called shapch-o-gwas.

Fields which have received a watering from the winter rains are sown from the 1st of February up to the 15th of March. This is called the máhalau, or early sowing, and is the best original season for sowing sohro. Such sowings always produce a crop, but a second pur, when the seed has sprouted, gives an excellent return. Subsequent sowings, known as pasht or pashti can take place up to July, but the produce is not so great. The stalks of pasht sowing, moreover, are liable to give colic to cattle if eaten green.

After receiving a pur, the field is left untouched for a week to allow the soil to absorb the moisture, after which it is namb or moist. Ploughing follows; this is generally double (do-dast-langár); if single, the ploughing is close and both ends of the furrows are double-ploughed as the share does not penetrate deep at the sides. No smoothing is done. Sowing is done with the drill (kapátag) owing to the great heat and to ensure that the seed goes deep enough to receive a sufficient quantity of moisture. Sowing with the drill is known as palli, but a drill woven from dwarf palm called kapátag is used instead of the wooden drill, usual elsewhere.

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TURE.

Sowing broadcast is known as sar chand or shank dayag and is generally resorted to in the case of spring crops. Not only sohro, but cotton, másh, parmásh, mak, melons and water melons are generally sown in the same field and are reaped in succession as soon as they are ripe. In the early part of the season the sprouts (tij) appear in ten or twelve days, but if the weather is milder and warmer, in four to six days. After fourteen days when the plant is 3 inches high the crop is sabs, and in a month when it becomes level with the furrows it is pal-é-darréch. Just before the ear appears the plant is gabb. The crop when in ear is hoshag, and pug-shan when the beard appears in the ears, and while the grain is still milky, it is shirag or kohal. The grain is ready for the mill within twenty days from the ear becoming hoshag. When being harvested (ron) the ears are first cut off the stalks after which the latter are cut about 3 inches above the ground. The karab is left in the field to dry and the ears are taken to the threshing floor called johán-ja or johándán where they are turned several times a day with the twopronged fork (do-shaha or jamko) or with the five-pronged fork (panchán) for about four days.

Threshing is done by three methods, ram, kunt and Threshing. hopag-o-mushag. The first is that usual in India, viz., by trampling; the second is done with the heavy beam which is dragged over the ears; and the third is done with the flail. The second way is usually confined to wheat and barley crops; and the third to millets, másh, etc.

The implement used in winnowing is the wooden spade, Winnowing called kásag or hanshon with which the grain and chaff are thrown in the air. Winnowing is called er-dayag and is always done in the afternoon since the jahli gwát springs up at that time and continues till evening. The chaff is called pug and the grain dán. The grain, when housed, is put. into large bags woven from dwarf palm called pát. respectability and social status of a person is determined by the dimensions and number of his páts; the local proverb has it that the post of Kauhdá of Dasht depends on the pát. In Zámurán and the khushkábas of Panjgúr the grain is stored in a pit dug in the ground, called kurm.

Máhalau juári is sown between February and March and harvested in May and June. Later or pashti sowings,

Juári sowings.

AGRICUL-TURE. between April and July, depend entirely on the rain, the crop being harvested within 90 to 100 days from the date of sowing. A mahalau crop of juári which receives a second watering from the sar-bashshám or garr-áp between the times when the plant is pal-é-dar-réch and gabb, not only produces a splendid crop at the first reaping, but ensures three harvests. Hence garr-áp is regarded by the cultivators as pure gold. For after the first crop (mátdár or maddár) has been harvested in May or June, new sprouts appear which will produce a somewhat smaller crop to be cut in August (téjár). The third cutting takes place in October (doimi téjár) unless cotton has been sown in the same field when the roots are stubbed up after the second cutting.

Pashti cultivation usually produces only a small outturn owing to the evaporation caused by the hot sun at the time when the crop is sown. With a second watering, however, it gives a moderate return. Sometimes it withers up altogether in indifferent soil. Even under the most favourable conditions it is never a favourite with the cultivator, not only on account of its small outturn, but because it prevents him enjoying the ámén season in Kéch or Panjgúr.

Crop area in the Dasht valley.

In the alluvial lands, known as bug, along the banks of the Dasht river, the cultivator, though certain both of a good spring and autumn crop, has an anxious time, for a high flood is liable to carry away everything he has sown. He watches the hills towards Kéch and Buléda, therefore, with his heart in his mouth, for a storm in that quarter may mean his destruction.

Judri in irrigated lands.

Zurrat, a variety of sohro which is peculiar to siáháp because it requires more water, is unlike sohro inasmuch as its seed time and harvest are fixed. The earliest crop is called liwáruk, from the fact that it ripens at the time of the liwár wind, and is sown in March or April, immediately after the reaping of the spring crop and in the same fields which were under wheat, barley or beans. Harvest takes place at the beginning of July and a second crop is obtained in September. Mostly liwáruk is cultivated in Kalátuk, Násirábád, Nodiz and Churbuk.

The next surrat crop is called gwardahl; it is a favourite with the cultivators of Kéch and Tump. There are three

sowings; that sown at the end of May or the beginning of June is called káppán kulli, from the fact that the half ripe dates are in rang at this time and squirrels and birds knock down much of the fruit. The crop is harvested at the end of September. The second sowing takes place at the end of June and the crop is reaped at the end of October. It is called nokná, because the date fruit is just ripening when it is sown. The third sowing is known as dishtári bur as the dishtári date is ready for gathering when it is sown. is sown in August and ripens by the 15th of December.

AGRICUL-TURE.

Zurrat in Kéch is sown broadcast. The field is first watered and then double-ploughed and left ready for the crop which the husbandman intends to till. Before sowing. he manures the field and then irrigates it. The seed is then put in and a double ploughing, followed by smoothing with the mars, takes place. The different stages of the crop are the same as in dry crop land.

Watering.

If the crop is uneven, the plants in the thicker parts are first transplanted to the thinner (dast jan). Subsequent waterings take place weekly. Zurrat matures in 110 to 120 days or some three weeks later than sohro.

> vation in Zámurán and Panigur.

A different system is followed in Zamuran and Panigur, Zurrat cultiwhere the seed is sown in a small bed, and the plants, when 6 inches high, are transplanted to the fields. They are usually set at intervals of one foot, but in good fields the distance is 2 feet as this affords plenty of room for the plants to grow. Waterings take place fortnightly owing to the cooler climate and the crop matures about a month later than in Kéch.

Weeding.

Little attention is paid to weeding called lad-o-buch. unirrigated areas, when the lands are ploughed, the weeds are collected and burnt when dry. In irrigated land the surrat is occasionally weeded when in ear. Tobacco fields are also cleaned when the plants are in flower, but other crops are not weeded at all.

Varieties.

The varieties of surrat and sohro locally recognised include kéchi surrat, pashshámag surrat, bor sohro and putto sohro. Kéchi surratis peculiar to Kéch, and is of two kinds. sohrdap, the grain of which is spotted red near the base. The rest of the grain is white. It is most widely sown in irrigated lands of the Kech niábat.

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Pashshámag is peculiar to Tump sub-niábat. Its ear is said to be larger than that of kéchi surrat, but the colour and the size of the grain are the same. Like kéchi zurrat it is of two kinds, sohrdap and ispétdap. The grain of the sohro sown in dry crop areas is reddish and the grain is smaller in size than kéchi surrat. Sohro is of two kinds, bor or brown and putto or hairy. The former is cultivated everywhere except in Kolwa where putto is grown. Putto is lighter in colour, but the grain is larger than that of bor. Both kinds of sohro have a peculiar sweet stalk which is eaten like sugarcane. Among varieties which are less extensively distributed may be mentioned, the masan-hosh of Zámurán which possesses a very big ear as its name implies. Its grain is large and light in colour but with a black spot at the base. Three mazan-hosh ears, the Zámuránis say, suffice for a guest and his horse. Ears weighing 11 seer are said to have been grown. The stalk is hard and strong and is only used for forage when green; when dry it is burnt as fuel.

Pattiko or dwarf, as its name signifies, is a sub-variety of masan-hosh, the only difference being that its stalk is much shorter. Láksar, which is widely grown in Panjgur, is said to resemble masan-hosh, but its ear bends downwards when it is ripe.

Of all these varieties *sohro* is the most important. It is the only kind which is produced in quantities sufficient for export, and it is used not only for human consumption but as fodder for animals also.

Diseases.

The two worst forms of diseases in the judri are béddnagi or grainlessness, and ispét-ták. Bé-dánagi results in the ears holding no grain. It appears as the ears are ripening and the cultivators attribute it to the wind, known as sar-gwát, which, they allege, causes small insects, resembling gnats, to be generated in the ears, which eat away the milky substance of the grain. The second crop of the máhalau and the pashti sowings are considered to be specially liable to it. If a gorich wind springs up after the crop has been attacked, a part of the produce is saved; otherwise an attack results in the total destruction of the crop. Once it has begun, it spreads very rapidly and is said to attack single stalks growing by

themselves. Ispét-ták attacks the crop when it is gabb, turning the leaves white and drying up the stalks. Neither its cause nor a remedy is known. Unlike bé-dánagi it does not attack the crop wholesale.

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Both diseases are said to occur periodically, bé-dánagi occurring once in six or seven years and ispét-ták every four or five years.

Uses.

As the staple food grain of the country, juári is generally made into cakes and eaten with fish or with laghati dates. Sometimes all three are eaten at the same time. It is also consumed with milk and its preparations. In irrigated areas where rice is grown, the flour of both grains is mixed and made into cakes, the combination being said to produce a peculiarly good flavour.

When half ripe the grain is boiled in milk by the well-todo or in water by the poor, and after the addition of a little salt, is eaten with great relish.

It is the usual grain ration for cattle (kadim) and if mixed with laghati dates and given to horses and camels, is considered to be very fattening.

Juári chaff called karab is a favourite food with all livestock but especially camels, which it fattens wonderfully.

The stalks, both green and dry, are used as fodder for cattle; camels and horses do best on the green stalks. The roots and the stalks of the masan-hosh in Zámurán are used as fuel.

Wheat.

Wheat is cultivated both in dry crop and irrigated lands. In the former it can only be successfully grown when suitable rainfall occurs. Wheat is not cultivated in Kolwa, as it is said to be peculiarly liable there to a disease called *dard* to which reference will be made later. It is also not cultivated in irrigated lands in Panjgúr, owing to the absence of light and air caused by the numerous date trees, but its place is taken by barley.

In Kech, wheat is cultivated in the fields, on which the date trees stand, and as they are not so closely planted, as in Panjgur, a crop is generally obtained, though the yield is insignificant. The few irrigated lands on which there are no date trees, especially those in Jusak, Kalatuk, Nasirabad and Tump, cover so small an area as to be scarcely worthy of special notice.

AGRICUL-TURE. Mand is the best known locality for the production of wheat and a single flood in the dry crop lands is sufficient to ensure excellent crops.

The wheat produced in the country is insufficient for local requirements and has hitherto had to be imported for the few levies with the názím. "Galla-o-gosht" or wheat bread and meat are quite a luxury to the bulk of the population. Wheat flour is imported from Karáchi and grain comes via Máshkél in Khárán and from Sarawán.

Irrigated cultivation

The fields set apart for the cultivation of wheat are called gallai dagár. They are ploughed as soon as the last wheat crop is off the ground and are afterwards left till the date crop has been picked, unless surrat is cultivated in them in the interval. After the date harvest a second ploughing takes place, and at tuhm kishán, from the 20th of October to the end of November, the field is watered and the seed is sown broadcast three days after when the moisture has been absorbed. This is succeeded by a single ploughing and levelling with the beam.

This sowing is called máhalau. Other sowings, called pasht or pashti, can take place up to December, but the produce of the latter is much less than that of the former. The seed sprouts four to seven days after sowing and is then tij or rusta; thirteen days later it is sabs and about 3 to 6 inches high; within the next twenty days the plant spreads becoming chuk-o-mát or the mother and sons and at this time the first watering after sowing is given; a second watering follows fourteen to eighteen days later and is called do-apag. When knots form in the stalks, fifty or sixty days after sowing, the crop is tir-o-pal or bog, and is now grazed down (hithwarán or kahwarán). Ninety days after sowing, the crop is as high as a man's knee and begins to swell with the ear (gabb or lápo) and a month later begins to come to maturity. It is reaped in the fifth month with the sickle, the handfuls (dásron) being collected into bundles fit for a man to carry (grám) and so transported to the threshing floor.

Wheat in unirrigated lands.

The only difference in the system of cultivation in dry crop lands is the use of the *kapálag* or drill. The capacity of the soil of these dry crop tracts for retaining moisture is indicated by the fact that a field which received irrigation so early in the year as February, is ploughed down and levelled, and

is kept for sowing in the following October and November. The same system is followed with fields receiving the summer rainfall; and a crop so sown is assured, but will be of excellent quality if it receives moisture during the first sixty days of its growth. The alluvial lands formed by the bands in the Rakhshán river are regarded as the best dry crop tract for wheat.

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Varieties.

The generic term for wheat is galla; and its varieties are known as mátoshag, and chírok, which are most extensively cultivated in the Kéch valley and panáro or pashmak, which are commonest in Buléda, Zámurán and Panjgúr; another kind is dahak which is grown in Panjgur. The colour of both mátoshag and chirok wheat is red but the latter is somewhat darker than the former. Mátoshag is famous for the size of its grain. It is cultivated only on a limited scale, as it is easily affected by dard. Chirok is considered the variety indigenous to Makrán and the grain is very small except in Panigur. It is much appreciated for its flavour and sweetness, and is popular for parching when green (tdpag and mushag). It is very sweet to the taste and in Panjgur and other localities is sown in equal proportions with other varieties. Panáro is the largest wheat grown in the country and is lighter in colour and rounder in shape than the others. Bread made from it, however; is not so sweet as that made from chirok, nor so nutritious as that made from dahak. Dahak resembles chirok but is larger and yellower in colour. Locally it is considered the equal of Mastung wheat in taste and quality but is believed to be even more nutritions.

Diseases.

The only disease to which wheat is liable is dard of which a mention has already been made. It generally attacks the crop at the time when it is coming into ear, causing the stalks to collapse as if in a paroxysm of "pain," whence its name. The stalk then shrivels and the ear is lost. Its visitations are either temporary and restricted, or general and extensive. The former are said to occur at intervals of three or four years but the damage done is slight; the latter sometimes damage two-thirds of the total crop.

Within living memory, some thirty-five years ago, an attack of dard occurred which is alleged to have been so

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Manure,

Dry crop lands are not manured at all and very little manure is used in irrigated land. It is not usual for any to be carried to the fields and put into it but about the close of the ámén season when all the nomads descend with their flocks to the shahristán, the cultivator arranges with the flockowners to let his flock sleep in each wheat field for a week. The consideration generally takes the shape of laghati dates. The system is known as saránkén or surface-manuring.

Subsidiary food crops. Barley.

Barley is grown on the same lines as wheat both in irrigated and unirrigated land, and is most extensively cultivated in Kolwa where it flourishes wonderfully. Instances are quoted, in which, fields which received a watering in March while the ripe barley crop was still standing, have been prepared for the next barley crop as soon as the standing crop was harvested and have yielded a fair crop, without further rain, twelve months later. Crops are said to have been obtained from a single watering received in January, on which the seed was sown in November, and the harvest reaped in the following March. A second watering, after the seed has sprouted ensures a crop. When the plants are at the proper stage, they are grazed down or cut back for nearly a month to prevent the crop from being attacked by dard. So luxurious is the growth, that the husbandmen say that the part which has been cut one day is level with the rest the day following. If the Kolwa barley fields receive a second flood, the news quickly spreads to Kéch and Panjgúr, whence the Kolwa cultivators are in the habit of getting their dates during the ámén, and creditors and traders go hurrying to Kolwa for the harvest, while caravans come from Béla for the grain.

Barley is made into leavened cakes and is also used as the grain ration for animals.

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Barley and wheat *bhúsa* is called *sipar* to distinguish it from that of other crops, called *pug*, and is stored as fodder for all animals. The Makrán camel, however, does not eat straw as do those in other parts of Baluchistán.

Rice is the most important autumn crop in irrigated tracts and next to juári forms the staple food grain of the people in the localities where it is grown. It requires a great deal of labour and also an enormous amount of manure; it is in fact the only crop in the cultivation of which manure is used in Makrán, human refuse, dung, weeds and leaves being collected for the purpose throughout the year. It has been classed as a subsidiary grain crop as it is peculiar to irrigated localities and is cultivated on a small scale compared with juári, wheat or barley.

The rice seed is sown at the end of March or the beginning of April, and the crop is reaped in September.

To prepare a bed for sowing rice, a double ploughing is first required, after which the green branches of kark (Calotropis gigantea) are put into it to lessen the heat of the soil. If no kark is available, tobacco stalks or a plant called kákénk are used in Kéch and the branches of ispantán and eshark in Panjgúr. The bed is now filled with water and the branches are then well trampled into the field, a process called kark-o-áp; after which a light log with a boy standing on it is drawn through it by two men to make the surface level. In small plots, the levelling is done by three or four men working together with their hands.

The next process is lurd-é-dar kanag which consists in changing the muddy water by opening the dak or channel of exit and letting water in by the garruk or entrance channel. This being done the field is filled with clean water, on which the seed is thrown broadcast and which goes at once to the bottom. Care is now taken to keep the field constantly filled with about 2 inches of water. Within fifty-five to sixty days of sowing the crop attains a height of about a foot, and is fit for transplantation. Meanwhile the fields, to which the plants are to be taken, are prepared by a double dry ploughing (hushkár), which is followed by watering and ploughing on four consecutive days while the water is standing in the fields (shaláp or shirdkár). Expert cultivators assert that the number of wet ploughings should

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Rice.

Rice cultivation. Sowing. AGRICUL-. TURE.

be fourteen but this is not practicable. After both the dry and wet ploughings, the field is ready for transplantation (sarkár) and the farmyard manure which has been collected in the intervals on the embankments is now put in with baskets: to this are added the green branches of the tamarisk after which the field is left for a fortnight. decomposition of the manure and tamarisk branches causes a horrible stench, which pervades the irrigated areas at this season. The worse the field smells, the better it is considered for rice cultivation and those fields are considered the best in which the frogs die of the smell. At the end of a fortnight another ploughing takes place and the surface is levelled, after which transplantation takes place, the seedling being planted in tufts called púla, at intervals of about 18 inches. The field is irrigated and a fresh supply of water is admitted every three or four days, about 3 inches of water being kept continuously in the field. In Panigur owing to the greater coldness of the climate water is only given every seven days, and it is not allowed to remain standing in the field which, however, is always kept muddy and damp. The crop matures within 120 days from the time of transplantation.

Varieties of rice.

Rice generally is known as brinj and five varieties are recognised, viz., murgi, washbo or sukhun, siáh, ispét and kúto. Murgi is cultivated principally in Kéch. Tump, Mand. Buléda and Sámi; it is generally ground into flour and eaten as bread and is considered second only to wheat. It is not considered sufficiently palatable to be boiled (bat). differs from other varieties in its short, fat grain and thick ear. It requires a good soil and a constant supply of water. Its husk is yellow and the grain white. Washbo or sukhun is little cultivated in Kéch and its neighbourhood but a moderate amount is to be seen in Buléda and it is the only variety grown in Panjgur. It is good for boiling. grain is thinner but longer than murgi. Its husk is reddish in colour. In Buléda it grows well on a poor soil but in Panigur it is sown in the best soil. Here it only requires watering once a fortnight. Siáh is only grown in Pídárk, Iamak, Gwarkop and Sámi. It has a dark husk and the grain is red, and is made into bread. Ispet is grown in the same localities except in Sámi. It has a reddish husk and

the grain is shorter even than that of *murgi*. Kúto is only sown in Zámurán. Its name means "bald," and the absence of a beard is its chief characteristic.

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Like wheat, rice is liable to attacks from dard. Rice straw is used as fodder for animals but contains little nourishment. It is not made into bhúsa.

Miscellaneous crops sown with sohro.

· As already mentioned, several miscellaneous crops are sown with sohro, viz., arzun, melons and water melons, másh, parmásh, mák, and cotton. The first and last will be described separately.

Melons and water melons.

Melons and water melons ripen at the same time as sohro, the latter being reaped first. The melons are eaten fresh and some of the water melons are stored. A Makrani does not usually wait for a melon to ripen before eating it. Makran melons and water melons are wanting both in size and taste. The stalks are used as camel fodder.

Másh (Phaseolus mungo).

Másh is cultivated as a subsidiary crop and is only sown in dry crop lands with juári. It is sown broadcast and is reaped a month after the sohro. Threshing is done with the flail. The straw is called másh-ai-pug and makes a good camel fodder. The green plants are also given to camels and greedily eaten.

Mák (Zea mays).

Másh grain is generally used as a pulse and made into a stew with ghi and spices. It is also cooked with rice by the well-to-do, a combination which is called bat-o-másh.

Parmásh (Phaseolus aconitifolius).

Mák ripens at the same time as másh but is not all reaped at once; the pods are gathered weekly after which the stalk is reaped. The grain is also made into a stew, but the poor generally boil it and eat it with salt. The straw is used as a camel fodder.

Parmásh, known in India as moth, ripens a fortnight later

than másh and is harvested in the same way. It is chiefly

sown for the sake of its fodder, and the well-to-do send their

riding camels to the dry crop tracts to be fed on it, as it is

very fattening.

The varieties cultivated in Makran are of two kinds, mulkorindigenous, and garruki. Mulki ripens earlier, but the plant does not attain the bushy growth of garruki. The latter has a broader leaf and keeps green to the end of September. Its pods are not so liable to be eaten by birds as is the case with the mulki variety, as they are hidden among the leaves.

Parmásh grain is made into a stew and is also boiled and eaten with the addition of salt. It is considered very fattening if given boiled with dates to horses and camels.

Arsun.

Arsun can be grown at any time of the year. Nasír Khán I of Kalát is said to have expressed amazement as to how the people of Makrán obtained a livelihood after he had burnt all their crops at each of his nine expeditions, and was told that their sowing was arsun which ripens within two or two and a quarter months of sowing. It is generally sown in the autumn, but is also sown with sohro in the summer, and in this case is reaped just as the juári comes into ear. If cultivated as a spring crop it is sown by itself and is treated in the same way as wheat or barley. Only a very small quantity is occasionally grown in irrigated lands (siáháp) and the crop may be said to be peculiar to khushkába. Kulánch, and especially the Kappar rés in Kulánch, is best known for arsun cultivation.

The grain is ground and made into bread, which, however, is dry and constipating. *Juári* is sometimes mixed with it. *Arsun* is also crushed and boiled.

The plant is given green to animals and the dry straw is also used as fodder.

Miscellaneous spring crops. Beans.

Among miscellaneous crops sown in the autumn banklenk (beans), which is cultivated in irrigated land, deserves special notice. In Kéch bánklénk is sown in the fields in which surrat has been cultivated in the preceding summer. One man ploughs the field while another sets the seed in the furrows at short intervals. But in Panigur, as the surrat is reaped one month later than in Kech and sowings of banklenk begin a month earlier, it is sown in the fields in which the pashti or late surrat is still standing; consequently no ploughing can be done, but the seed is planted in holes dug with the sickle amidst the standing crop. The same system, known as kalluk, is also ordinarily followed in Panjgur, even where a mahalau crop of surrat has been actually reaped. If n gins is sown with banklenk, as is occasionally done in Panigur, the land is watered, after which the nigins seed is scattered broadcast and the field is ploughed, bánklénk being finally put in on the kalluk system. Bánklénk is irrigated in the same way as wheat and is harvested at the same time. When in flower it is called pul and when in pod kosirk.

It is the most favourite pulse used by the Makranis and much prized. In Buléda it is ground and made into cakes, and is also cooked with rice; generally, however, it is made into stew, nárusht. After being boiled, it is largely bartered by hawkers for dates, cereals, etc. Raw bánklénk is bartered for two to three weights of best fresh dates. The poor buy bánklénk at the harvest time and barter it, during the following ámén, for dates which they carry to Gwádar or Pasni, where they exchange them for dried fish, and again barter the fish for cereals, etc., in the interior.

The straw makes good fodder for camels and is stored with this object. The tops, cut when the plant is green, are also very fattening.

Cotton, known as karpás, is generally grown in dry crop areas, Kulanch and Dasht being best known for its cultivation. A very small quantity is also grown in the irrigated tracts of Kech and Tump, merely for the sake of rotation of crops. It is sown with sohro and ripens latest of all the mixed crops sown with the latter. The seed is always soaked for twenty-four hours, before it is sown. It is then sown with the hand in furrows at intervals of some 6 feet. A very small amount of seed is used even for a large field. The growth is slow and it is only about 2 feet high at the time of the sohro harvest, the more luxuriant growth of the It is now known as nihál. sohro retarding its progress. After the sohro harvest it grows faster, and by the time all the other crops in the field have been harvested, it is 4 or 5 feet high and is called karpás. After being in flower for ten or fifteen days, the bolls begin to form, when the crop is minj. After they have developed they are kulont. At the end of September the early winter gorich begins to blow, causing the bolls to burst, and they are gathered at weekly intervals up to the beginning of December.,

Pluckings can take place from a single crop for five successive years. In the first year the yield is inconsiderable, but the cotton is of the best quality and is known as niháli karpás. In the second and third years the yield increases three-fold and is known as karpás. The picking (chén) begins earlier, at the end of August, but September and October give the largest yield after which it gradually decreases. In the fourth year the yield decreases con-

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Fibres, Cotton.

siderably and the plants become old and stiff (dad). The cotton, too, loses its quality. If not uprooted at this time, as is usually done, the outturn in the fifth year is insignificant and the cotton of the poorest quality. The women, children or servile dependants of the cultivator generally do the picking. If hired labour is employed, special terms are agreed upon. There is no general system of dividing the amount picked between the labourer and the employer. A good cotton plant yields in one season from 2 to 3 standard seers of cotton in eight to ten pickings.

A variety of cotton grown in irrigated lands is reddish brown in colour and is called wad-rang. The cotton is used for the manufacture of khéses.

Much of the cotton produced is sent to Gwadar and Pasni in the bolls by the Hindu traders who purchase it from the cultivators. Only that for local use is cleaned locally with an implement called the *char*.

Manure and rotation.

It will be seen from the foregoing pages that manure is only used for wheat and rice in irrigated lands, and occasionally for *surrat*. A mode of manuring dry crop lands, especially in Nigwar, is to remove the site of the villages to such lands as have lost their fertility so that the dirt of the village may, in course of time, restore the soil.

It is seldom found possible to allow land to lie fallow in irrigated areas, but, where it is possible to do so, fallow is allowed for one or two years as often as possible. When irrigated land has become practically useless, the owner, a man of means, cultivates rice during the summer by way of rotation, and the amount of manure which is used renders it capable of cultivation with wheat or barley during the winter. A wheat crop in irrigated lands is occasionally followed by barley and afterwards with surrat, or by bdnklėnk followed by cotton or surrat, after which wheat is again cultivated, but the usual practice is to sow wheat in the same field year after year.

Lands subject to floods are not left fallow, as each flood deposits a layer of silt which constantly restores their qualities.

Khushkaba lands proper, i.e., those dependent entirely on rain, are never cultivated for continuous periods, owing to the uncertainty of the rainfall, and do not therefore require to be left fallow. Moreover, a few fields are filled in one season and others in the next, giving a natural rotation. So large, again, is the amount of land available that the cultivator is able to set aside different plots for *sohro*, wheat and barley.

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Garden and vegetable production.

The date is to be seen everywhere, but fruit orchards generally are scarce. They are to be seen here and there in Kéch and Panjgúr, where there is a supply of permanent water. Mangoes are the most numerous trees in Kéch; there are also guavas, lemons, sweet and sour limes, plantains (moz), sebestens (Cordia myxa), locally known as liwar, kunar (Zisyphus jujuba), the tamarind (chichak) and a few figs. Zámurán produces apples and Panigúr grapes and pomegranates in large quantities. A considerable extension of gardens, orchards and vineyards is said to have taken place in Panigur within the last forty years. Formerly no fruit was sold but now (1904) numerous walled gardens are to be found. The grapes are exchanged for judri in the proportion of 1 to 2 or sell at about 12 seers per rupee in the height of the season. The pomegranates are sold at eighty for a rupee. All this fruit is consumed locally and none is exported. On the whole the quality of the fruit is indifferent, nor is it likely to improve as the Makráni's passion' for dates prevents him from using available supply of water for any other kind of fruit. Both sweet melons and water melons are grown, but are not of particularly good quality.

Vegetables of the commoner kinds may be said to be a rarity, the Makráni looking on such things with contempt and terming them indiscriminately káh, i.e., grass. Radishes and carrots are grown both in Kéch and Panjgúr; turnips are cultivated only in the latter place and are considered a luxury to be eaten with dates. Pumpkins called khostch and a few brinjals are also grown in Kéch for the consumption of the rich. A little spinach has recently been introduced into Turbat from Kachhi, and onions are to be got here and there. The only vegetable commonly cultivated in Kéch is the sweet potato (Ipomaea batatas), locally known as pindál, which can be had nearly all the year round. It is propagated like the potato, and is most productive in the cold weather. It is boiled by hawkers and

AGRICUL-TURE. Dates. bartered in equal weights with cereals of all kinds except rice, for which it is exchanged in the proportion of 2 to 1.

Dates (ná or hurmág) are par excellence the crop of Makrán and a story is told which well illustrates the importance attached by the Makranis to amen, the season of harvesting the dates. A Makrani went to India and heard much of the generosity of a certain king. He enquired whether the king was in the habit of giving food to his subjects, and on receiving a reply in the negative, he laughed and scoffed at such a ruler. Asked why he did so, he said that in his country there was a chief who visited all parts during four months of every year. During his stay he always gave sweet fresh food, not only to all the people of the country, the dwellers in the jungle, the cultivators, the rich and the poor, but also to the camels, the cows, the donkeys, the sheep and the dogs, and his benevolence was so far-reaching that, not only during his stay in the country but on taking his departure, he bestowed on each man sufficient to provide him throughout the remainder of the year. In surprise his listeners asked what chief this could be, and the answer was: "Our chief is Mir Amén."

Amén, the date season from July to September, is the pivoting point, round which the thoughts of all the people of Makrán circle and, no sooner has the season arrived, than the people flock from all parts to Kéch and Panjgur. The highland Baloch pour down into the valleys, while the fishermen and nomads of the barren coast come trooping northward into the date districts. The women of all the country-side are collected in the date-producing tracts, and so many of their husbands, as can possibly do so, accompany them. Here all remain for four months picking dates and living on what is, to them, the fat of the land. Horses, camels, cows, donkeys, everybody, everything lives on the date.

HISTORICAL.—The date in the torrid zone of Asia goes back to pre-historic times. In Makrán, tradition asserts that the date was introduced at the time of the early Arab invasions when that race established cantonments in different parts of Makrán and Sind; but evidence is to be found of the existence of the date in Makrán at a much earlier period than the seventh century, for both Arrian and

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Strabo mention the palm-tree and dates of Gedrosia when Alexander the Great marched through that country in 326 B.C. In the Anabasis we are told that the principal food of the Icthyophagoi was dates in addition to fish, and it was by obtaining a large supply of dates that the remnant of Alexander's army was saved from destruction in the terrible wastes in which it found itself.

It seems probable that offshoots of trees from Arabia and the Euphrates valley have been introduced from time to time into Makrán. There has been from time immemorial a great deal of traffic between Gwádar and the other coast ports of Makrán and Maskat, and the names of some of the species of dates such as jowána bu shams, masúdi, músali (from Músal in Syria), rabai, barni and haléni are probably Arabic in a more or less corrupted form.

VARIETIES.—Date trees (mach) are to be found almost everywhere, but the principal localities which are famous for them are Kéch and Panigur. All dates belong to the species Phænix dactylifera, and varieties have not been distinguished by botanists, but it is well known how immensely nicer to the palate some kinds are than others. Makran is no exception to this rule, and more than a hundred different names are to be found for the various kinds. The general distinction made is in the colour, size, shape and taste of the fruit. Some kinds are large, making more than a mouthful; some kinds are tiny like marbles; some are dry; some are juicy; some like the shish and páchiki are nothing but skin Long familiarity enables expert cultivators to and bone. distinguish the better known kinds of dates by their leaves and general appearance, but this is impossible for the ordinary individual.

All date-trees are divided by the Makránis into two classes, nasabi and kuroch. Nasabi are pedigree trees, the names of which have been handed down from generation to generation, while kuroch* are indigenous, self sown trees, some of which are good and some indifferent. The nasabi trees include the best and highest priced varieties such as apédandán, bégam jangi, haléni, násani, or násan é-tabaqi, sardé-kallagi, műsáti or műsáwati and sabso, which are all first class varieties. Among pedigree dates of second quality

NOTE. - Kuroch literally means a bastard.

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may be mentioned jowána-bu-shams, dandári, gurbago, shingish kand and the Panjgúr date kah-rubá from which the juice is extracted for filling the famous humb or date-jars. Of pedigree dates of ordinary quality dishtári, rogini, kaléri, husséni and kungo are perhaps the best known; to this class may also be added gogná, the cow-date, the largest date known in Makrán with the exception of kala diszaki. Lists of dates classified according to the quality of the fruit will be found in appendix V.

The qualities of all these dates vary considerably and they are used for different purposes; thus: ap-é-dandán in Kéch and sabso, its counter-part in taste in Panjgúr, are seldom preserved and nearly always eaten fresh. The same may be said of názani, bégam-jangi, haléni and chapshuk. Músáti or músáwati are, on the other hand, nearly always specially preserved in humbs for export. These kinds are especially fine and juicy. There can be little doubt that the best kinds of Makrán dates, daintily put up in boxes, as the French in Algeria so well know how to do, would fetch good prices in European markets.

CULTIVATION.—The date-tree is almost invariably raised from a selected offset (gwang or nihál). Trees do indeed grow from seed, but the fruit is poor, and it has been noted that the fruit of a tree grown from seed does not resemble that of the parent tree. When the date tree is young it produces a number of root-suckers round the root, a cluster of which is called jap, shap, jinsh shappuk or puch. Out of these root suckers three or four offsets are selected and the remainder are cut off, as they take much nourishment out of the parent tree. Once the root-suckers have been removed new ones are seldom made.

At the time of the removal of the offsets some of the rootsuckers are permitted to remain attached to the parent tree and are known as *jamal* or *jár*. These *jamal* or *jár*, even though they attain a height equal to that of the parent stock, are never known as *mach*. They gradually separate themselves further and further from the main stem, and in five or six years attain a man's height. They produce fruit like the ordinary trees and sooner than trees grown from offsets.

The offsets selected for the growth of new trees, which are known as gwang from the time of their selection and the removal of the useless root-suckers, are allowed to remain with the parent-tree for a period which varies from three to ten years. The more valuable the tree the shorter the time for which the offsets are allowed to remain with the parent-stem, but the minimum period must be three years. Thus in the case of good trees like haleni and begam-jangi, the offsets are removed as soon as possible. The leaflets of an offset attain full size when it is only two years old. At this time, however, the plant is only about 3 feet high, and it is a curious fact that it seldom makes much further growth up

At the end of three to eight years the time has come for transplantation to the cultivator's fields. The best soil for dates is the white clay known as milk. The fields are generally small square plots, about 60 yards by 45. A channel (kalmtr), about 2 feet broad by 1½ feet deep, is first dug between two contiguous fields, and at intervals of 7 to 14 yards along this channel, circular holes are dug of varying sizes but generally about 8 to 12 inches deep. This is done at the end of winter and beginning of spring, between the end of February and the beginning of April.

to the time of its removal from the parent-stock.

The offsets are now brought. All leaslets on the lower part of the main stem are cut off and are used for binding together the upper leaslets round the main stem (kish), which are also cut off at a point about 6 inches above the top of the stem. The whole of that portion of the offset which will be above the ground when planted is now wrapped in date fibre (púns) or in matting made of the dwarf palm. This protects it from the heat in summer and from the cold in winter. The offset is then put in one of the holes and rammed tight with earth. Very few of the offsets fail.

For forty days after planting, water is given every alternate day. After that, water is required every fourth day for a year. At the end of this time leaslets begin to grow and to appear above the wrapper of date-fibre, but the wrapper is not removed until the upper end of the stem (kúsh) has made its appearance.

At the end of about four years, the stem has grown about 2 feet high and presents the appearance of a dwarf tree. From this time it begins to fruit, generally bearing two or three bunches which nearly touch the ground. By the time

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it is eight years old the tree attains a man's height and is known as mach, i.e., a full-grown tree. After the first year it has been given water every seventh day; as soon as its roots have penetrated into the surrounding fields it no longer requires a special supply of water or manure but obtains the necessary moisture and nourishment from the cultivation of the field in which it stands. The strength of the tree, however, and the quality of fruit depend largely on the soil and the supply of water which it gets. It grows very rapidly when young (warna), and if it gets plenty of water, experts say that it will retain its youth during the lives of three men or about 180 years. If, on the other hand, it gets little water it soon grows old, and both the quantity and the quality of the fruit deteriorate. A tree which has been well cared for attains a height of 80 to 100 feet and a girth of about 5 feet.

The kinds known as peshná, dishtári, rogini and jowáná grow very rapidly and attain a greater height than others. Chapshuk, haléni, kungo shakari and kúsanibád are earlier bearers than the rest. So greatly is the date tree valued in Makrán that a temporary tenant, who plants fresh date trees and afterwards abandons the tenancy, retains a half share in the trees thus planted in which he has an alienable hereditary right. Strangers frequently turn up in the date-groves claiming half the produce of the tree with the owner. The cultivation of the date tree is undoubtedly increasing rapidly. As new sources of irrigation are opened up, thousands of date trees are planted, and planting takes place in dry crop areas whenever the water is sufficiently near the surface.

The fruit season.

The date tree owner's year contains four well-marked periods: machosp, pappukwár, rang or kulont with nokná and ámén. Machosp is the season of the fertilisation of the date-spathes; pappukwár denotes the eating of the green fruit; rang or kulont the appearance of the colour of the date, ending with nokná, the new fruit, when a few early ones are to be gathered; and ámén the season when the fruit has matured and plucking takes place.

Soon after the middle of February the terminal bunch or heart of green leaves (kúsh) begins to produce ten or twenty brown coloured sheathes or spathes. These spathes are known as doliko or kokir; those of the female tree are

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about 2 feet long and 4 to 6 inches wide, while those of the male tree (gush) are rather broader. The spathe is conically shaped at the bottom and wide towards the top. When the female spathe has come to maturity it cracks exactly in the centre of one side. The time has now come for impregnation. The spathe of the male tree is not allowed to open, as by so doing the pollen which it contains becomes ineffective. Before opening, it is detached from the stem and the holumb is extracted. The holumb consists of a central stalk containing forty to fifty small flexible sprigs, along each of which grow small grains or seeds in which is contained some white powder or pollen. sprigs from the holumb are now taken to the female tree. and one to ten are inserted into the spathe which has cracked. Fertilisation takes place within three days, after which the services of the male sprigs are no longer reauired.

Some trees require more twigs to effect impregnation than others. The better sorts, for instance, such as haléni, bégam-jangi and dishtári, which produce large and heavy bunches of dates, require as many as ten twigs, while for inferior sorts, such as kungo, a single twig is sufficient. If any male spathes appear before the female spathes are ready for impregnation, the cultivators preserve the male sprigs by extracting them from the spathe and hanging them up in their houses away from exposure to wind and rain. Sprigs thus dried will last for several months, but they are not so effective as the fresh ones. In a few cases natural fertilisation takes place, the pollen from the male spathe being carried by bees, or blown by the wind to the female dates, but as a rule resort is had to artificial impregnation.

The interior of the female spathe contains twelve or fifteen small yellow coloured flexible twigs about 18 inches long, and on each of these twigs appear twelve or fifteen eyelets. If the fertilisation has been insufficient, or even if fertilisation has not taken place, each of these eyelets produces four grains which constitute the fruit in embryo. On development, however, such fruit is sour, stoneless and tasteless and falls from the tree in large quantities. It is not eaten by human beings but is given to animals. A

useless bunch of this kind is known as *pinag*. If, on the other hand, full fertilisation has taken place, a single date forms on each of the eyelets and no grains make their appearance. After the fruit stem has burst from it, the paper-like covering of the spathe becomes like the bark of a tree and in this state it is known as *kolicha*.

The green dates.

Three months after machosp, that is to say, by the middle of May, the fruit has developed and become deep green. is known as pappuk. Much bustle may now be observed among the women folk, and early in the mornings all the women and girls are to be seen in the soft light of early dawn moving towards the fields carrying copper pots and wooden dishes in their hands. Children follow the party singing songs, which mix with the muffled talk of the women, and presently all are to be seen returning with their vessels laden with the new fruit on their heads. Pappuk dates are not much relished by the rich, who for the most part feed their animals on them, but they are eaten in large quantities by the poor, generally in one of two ways, sorápag or rékiwár. Sorápag (sour water) is made by putting the immature dates into a flat basket made of a dwarf palm with high sides (sabt). They are then beaten with a stick, and the sour juice is extracted without rubbing off the The fruit is then put into a vessel, an earthen one for preference, and kept under a thick coverlet for a night, when the fruit resembles ripe dates in appearance though not in taste. Rékiwár means "eating after ripening on the sand." The dates are picked in the morning and placed in the sun on the sand till they look like ripe dates.

The appearance of colour on the fruit.

About the end of May only one subject of conversation prevails among all classes, rang or kulont, that is to say, the appearance of the colour of the matured fruit. Everybody has been on the tip-toe of expectation for the nisháni, the observance of a single date in colour, and no sooner has one been seen than the news is transmitted from mouth to mouth. This is the gwáhi. Stranger or friend, every one is full of the gwáhi, and the person who possesses the information will not give it at once and at full length, but bit by bit and grudgingly, so that he may fully enjoy the anxiety of his listeners, who are all eager to hear the news and whose faces indicate every sensation of satisfaction and delight.

The period of the rang lasts in Kéch for about the first twenty days of June, and the half-ripe dates of immature colour are called kulont. The date when kulont is heavier than when ripe (ná), as it contains more juice. A kulont will not skin in water, while the ná will do so.

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Amen, the date harvest

From the 20th of June to the end of the month small quantities of ripe dates are obtainable but they are regarded as curiosities and sent as presents to friends. July, August and September is the ámén or harvesting season. What the origin of this word is it would be interesting to know: it has a curious resemblance to the amen of the Hebrew. The season begins with the peshna, or "first of all," and ends with the pashpág, or "latest of all," and it is at this time that all the Makránis are collected in the date groves as already described.

The most common method of gathering the fruit in Kéch is with the small jar-shaped palm-basket (sund) which has a small string made of palm leaf round its neck. This is passed over the bunch of dates, when it is half ripe, and the mouth is closed by drawing the string tight. After about three weeks the bunch of dates and the basket are removed together.

dates.

A picker climbs the tree with the help of an ascender, Plucking the called tor in Kéch and parbun in Panigur. This ascender consists of a flat broad strap woven from palm leaves, called chakata about 22 inches long by 81 inches at its broadest point. At one end of this strap is a loop and at the other, two palm ropes, the one long and the other short. The short rope is to carry the climber's knife. The long one is passed from the strap round the trunk of the tree, and through the loop at the other end of the strap. It is then fastened to a smaller loop at the place where it commenced, thus describing a complete circle. When the picker is climbing the strap is kept on the flat of the back, but when he is plucking the fruit it is placed round the loins.

On reaching the top the climber either uses his sund or a piece of cloth, which he attaches to his waist, and which is stretched by a small stick with a hook in the centre. This hook enables the cloth to be fastened to the leaf of the tree. while the climber shakes the fruit into it. The climber at the same time gradually works round the tree so as

to collect from each bunch. This method is most common in Tump and Panigur.

Those kinds of dates which contain a large amount of saccharine juice such as haléni, bégam-jangi and chapshuk are not put into palm leaf baskets, as by this process they become black inside (pon) and decay, but they are shaken off and preserved in jars. The ripe fruit of each tree is gathered every third day, and the plucking of a tree lasts for about a month.

Bastard dates.

During amen fresh bunches of dates appear on the tree. The fruit is small as impregnation is not possible at this time of the year. It ripens in May of the following year but it is stoneless, has little taste, and is of no use. It is termed by the cultivators kihur, i.e., bastard.

Weight of produce.

The actual weight of fruit produced per tree is difficult to estimate. Actual experiments made in 1903 indicated the weight of the half ripe fruit of a single haléni tree at 31 standard maunds, but the fruit, when ripe, is much lighter than when half-ripe and probably less in weight by about onethird. The average produce of ripe fruit from a tree may therefore be estimated at from 11 to 3 standard maunds. Even this amount varies largely according to the character of the tree, the soil in which it grows and the amount of water it receives. It is probable that a good tree of the gosná kind, which is well situated and well cultivated, will yield as much as 6 maunds. A story is told of a wager made by the Gichki and Naushérwáni chiefs as to whether a full grown Khárán camel could lift the kulont produce of a músáti tree in Panigúr, but it failed to do so. The estimates of the weight of produce given in the statement, which will be found in appendix V, were obtained from the cultivators themselves but are probably below the mark.

Preservation

Dates are preserved in several different ways. The best of the dates. kinds. which are intended for sale, are generally preserved as humb or dánagi, while inferior kinds are made into laghati. The latter process is the most general and most popular method of preserving for all purposes throughout Kéch.

The humb.

Three sizes of humb are in use, large, medium and The two latter are somewhat like a drain-pipe small. narrowing towards the neck, which is about 3 inches wide; the larger kind resembles a large pitcher with a wide

mouth and is only kept for home use. Dates when exported are always packed in the small humb. A large humb costs 3 annas; a medium sized one 2 annas; and a small one about 1 anna. They are made at Isai and Turbat from red clay obtained from the hills. Haléni, bégam-jangi, chapshuk, kaléri and músdti or musdwati are the kinds most commonly used for preserving in jars. As a rule they are so preserved when fully ripe, but the immature fruit of the haléni date is sometimes gathered and put into the sun for four to eight days and then preserved. In Panjgur the músdti alone is used for preserving by this method, and in this locality a somewhat different method of preservation is followed to that in vogue in Kéch.

In Kéch the process followed for extracting the juice to be put with the dates is as follows. A space of ground is cleared about 4 feet by 2 hollowed towards the centre and carefully plastered. In the centre, an earthenware bowl with a broad mouth (tagdr) is fixed. Four sund or two patkos* of some kind of date, which contains a large amount of saccharine juice, such as humbi, kaleruk, rogini or gonsali, are then placed on the other side of the sloping space above the bowl, and on the top of them is laid a heavy trunk of a date tree. With this the baskets of dates are pressed, and if more pressure is required other trunks are superadded. The juice is gathered in the bowl, one bowl of juice being sufficient for two jars of dates of medium size and containing about 4 or 5 seers. In Panjgur the date known as kahrubá is that from which juice is extracted.

Dánagi is made from all kinds of dates, superior or inferior. Generally, each kind of date is preserved separately, but sometimes several kinds are mixed together. When the fruit is ripe and well developed it is plucked and in the case of superior kinds, the little hard yellow attachment at the end of the stem (srumpag) is extracted. The dates are then put into dried goat or sheep skins, known as hinsak, or into baskets made of palm leaves, called pát, which are then closed. Dánagi of an inferior quality is made of dates at all stages of ripening.

Laghati denotes "pounded with the feet." By this method, which is not in vogue in Panjgur, dates of inferior

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Danagi.

Laghati.

^{*} Note. - A patkos=2 sund.

quality are pressed with the feet on a big palm mat, and are then put into palm-leaf bags each of which holds about 12 standard seers. Laghati thus made constitutes the principal food of the poor of Makrán and it is also given to all kinds of animals. A large amount of it is exported and is a common article of trade. When intended for personal use, special care is taken in the preparation of laghati, the dates being selected and the small yellow attachment being removed.

Special preparations.

Special preparations are also made of the better qualities of dates. Haléni and músáti are made into hárag, the immature fruit of these trees being boiled and then dried in the sun. Dastlaghásh is prepared from haléni and dandári in Kéch and from músáti in Panjgúr by skinning the fruit. extracting the stone and its yellow attachment, and then kneading the dates into a paste. They are then put into a dry sheep skin (hinsak), which contains about a maund, or into small date-palm bags, known as garko in Kéch and páchak at Panigur. Tallo is another preparation made from haléni and bégam-jangi, the dates from these trees being cut lengthwise into two pieces and then preserved in jars. This process is in vogue only in Kech. In Panigur the músáti date is cut in two halves horizontally and then threaded on a string, each string, when full, weighing about 1 lb. Such dates are known as lar. Another preparation made at Panjgur, which is known as chuptagen kulont, is manufactured by cutting the immature fruit of the sabso date into small pieces and then preserving it in juice in a jar. This is not made for sale. In Kéch, hárag prepared from músáti dates is pounded very fine and mixed with fried sesame and called kunchitohárag.

Trade in dates.

The trade in dates is exclusively in the hands of the Hindu baniá and is chiefly carried on by barter. In 1903, a seer of wheat was being bartered in Kéch for four of dates; a seer of rice, beans, millet or barley for 3 of dates; and a seer of good fish for 6 of dates. Salt and dates were being exchanged in equal quantities.

In the same year in Panjgur, wheat and musati dates were being exchanged in equal quantities during amen, while other kinds were being bartered at the rate of 3 seers of dates to 1 of wheat. The rate of exchange of dates

for barley was as 2 or 3 to 1, and for juári or maize equal quantities or as 1 to 2.

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Immediately after the date harvest a pát, containing 12 seers of laghati dates, sells at 8 to 12 annas. The price of the ordinary Kéch humb after the ámén is 8 annas, but it subsequently rises to R. 1. Panigur humbs sell for Rs. 20 per hundred after the ámén, and later on at 4 annas a piece. Hárag is sold at from 18 to 24 seers per rupee. In Panigur the músáti date generally sells after a good harvest at the rate of 24 seers per rupee, but in bad years the price rises to 18 seers per rupee. Other kinds sell at the rate of 11 maunds per rupee in good years and 36 seers in bad years. The cultivators make frequent exchanges of dates for grain among themselves. Another class, chiefly from Kolwa and Kulánch, is engaged in the carrying trade between the ports and Kéch, bringing saltfish and exchanging it for dates. Caravans from the Ihalawán and Sarawán country, Las Béla and Dizzak come to Panigur bringing tobacco and grain which are exchanged for dates.

Date leaslets are used in the manufacture of baskets and also for making mats and many other articles. The kúsh of the tree, or terminal heart, is extracted and eaten with great relish. It is considered a dainty, and is frequently sent as a present by an inferior to a superior. A concoction, made by boiling dates, is given to children immediately after birth, and dates mixed with ashes and ghi are used as a fomentation. A solution of date, kark (Calotropis gigantea), and salt is used for tanning. The tree provides the only timber available for building and so long as it is not embedded in the ground is hard and durable, especially the trunks of the dishtári, gonsali, jowána and péshna.

The way in which dates are consumed has been described in the section on **Population**. Animals of all kinds are fattened by giving them a gruel (nok), made of compressed dates kneaded in water, every morning and evening during the ámén season. In the day time fodder is given mixed with half ripe dates and in the evening the grain ration is also mixed with dates. The result on the animal, whether cow, horse, camel or sheep, is quickly apparent. Care should be taken not to work the animal hard during this

Miscellaneous products

time or to allow it in the sun, as it is liable to die from a disease called *pigsind*, which means "fat rupture."

Diseases.

The most serious disease which attacks the date tree is described by the cultivators as madness. The branches and leaves of the tree become crumpled, crooked and drooping, though retaining their green colour, and the tree in some cases does not recover from the effects.

The gorich wind, if it blows between April and June, does much injury to the unripe dates and causes a disease known as chal or ramp, and rain between July and September also injures the fruit and turns it sour. This is known as bash. In Panjgur, from some unknown cause, much of the fruit falls off in certain years both at the time of pappuk and of rang. It is also alleged that within recent times in Panjgur many of the trees only fruit in every alternate year. The sabso date in Panjgur is not a hardy tree and sometimes all the fruit is stoneless (pinag).

The date in Panjgur.

Except where reference has been made to Panigur, the above remarks have special application to the cultivation of the date in Kech. The differences in the methods of cultivation, preservation etc., occurring in the colder climate of Panigur are, however, insignificant. The date is known as hurmág in Panigur as distinguished from the ná of Kéch. The seasons of machosp, rang and amen, too, are later, machosp lasting from 15th of March to 15th of May; rang from 15th of June to 15th of July; and amen from 1st of August to the end of October or 15th of November. Owing to the colder climate, the gwang takes longer to come to maturity and to bear fruit; kahrubá trees do not bear for five years and músáti for eight, even in the best soil. The people of Panigur, too, are indifferent cultivators as compared with those of Kéch; they seldom plant their trees in lines and place them much closer together, thereby causing deterioration in the soil with a resultant decrease in produce. Many of the young gwang also die off; sometimes as many as 50 per cent.

In extracting the juice of the kahrubd date for humb preservation, a press is used made either from the stock of a date tree or from a mud pillar with a hollow round the top in which flat stones are placed with the sund between them and pressure is induced with the trunks of date trees

attached to a growing tree. Laghati is not manufactured in Panigur: dánagi is the usual method of preservation, and owing to pressure not having been brought to bear on the fruit it is liable to rot (chal or pon) and to attacks from insects, and it seldom lasts for more than six months. list of the dates characteristic of Panigur will be found in the appendix, to which reference has already been made.

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The methods of cultivation are still extremely primitive and Extension or no improvement of any kind is observable. There is historical evidence that Makrán was once renowned for its sugarcane and there seems to be no reason why, in time, the cultivation of this and other Indian crops, as gram, should not be introduced with advantage.

decrease of and improvements in cultivation.

That cultivation, with the advent of peace and security, is gradually extending, there can be little doubt, proof of which is forthcoming in the attention now given by nomads to agriculture and in the slow but gradual opening up of new sources of irrigation such as the channel lately cut from the Kil Kaur to irrigate land in Oshap and another called Kásmi-jo which has been recently excavated in Upper Kolwa. Probably a good deal could be done in future by the extension of well cultivation and many old-kárézes still are to be seen, the re-opening of which would lead to further progress.

Agricultural implements.

A complete list of the implements used with the vernacular names of each will be found in appendix VI.

The cultivators' principal implements are the plough which is known as langar, and the plank-harrow or scraper (arin or ken) with which he makes embankments, the clod crusher or log used in place of a roller for breaking clods and smoothing the ground known as mars or málag. Among minor implements may be mentioned the kalmagor or koráz, an iron-pronged fork used for making small embankments, the rambi or spud used for weeding, the kodál or mattock, the bard or shovel and the dás or sickle. iron bar with a sharp point, used for digging holes and largely used by Makráni cultivators for transplanting date plants, is known as múbang or métin. Forks either with two prongs (do-shaha) or five prongs (panchan) are used for winnowing, and also a wooden spade called dali.

arin or kén is drawn with iron chains, but sometimes dwarf palm ropes are used.

No wooden carts are used; the animal employed for collecting and removing manure is the donkey; for tilling the ground, the bullock; and for transport of the produce, the camel.

Indebtedness of the cultivators.

So far as can be ascertained, the cultivating classes in Makrán are, generally speaking, not heavily involved in debt. There appear to be several reasons for this state of things, among them being the fact that their standard of living is low; that the cultivator generally supplements his means of livelihood by flockowning and by transport; that the unsettled state of the country has hitherto prevented Hindu banias from carrying on money-lending transactions on a large scale with safety; that the system of co-operation, known as bijjár, and subscriptions detailed in the section on Population obviates the necessity of contracting debt for ceremonial occasions; and last but not least, the right of property possessed in much of the land and water by the women as their dower. The love of his land is inbred in the Baloch and he has the strongest objection to part with it.

Such few sales of land as are negotiated generally take place in irrigated areas, and the arrangement is entered into for the mutual advantage both of vendor and purchaser, as the former probably desires to invest the money obtained by the sale in a more convenient locality. The right of preemption, it may be mentioned, is recognised everywhere.

Mortgages are generally contracted between the cultivators themselves. Interest is not taken, but the mortgagee is given possession, on terms previously arranged, until the principal is repaid. No Hindu engages in such transactions. He confines himself to making grain advances on the cultivator's crop which are repaid at the next harvest. On the coast, the usual rate of interest for small cash advances is 1 anna in the rupee per mensem. Mortgage bonds and sale deeds, called kabs, are executed by the local mullů.

Domestic

Camels, horses, donkeys and bullocks are the principal domestic animals. A few buffaloes are also kept. Large numbers of sheep and goats are reared in the country and

there are a good many groups whose sole occupation is flockowning while, as already stated, many of the cultivators combine flockowning with cultivation. Fowls are reared in large quantities in the country; the price for a fowl of medium size, viz., 4 annas, required by Government servants has been fixed by the Administration. Eggs can also be had in large quantities and cost 3 annas per dozen.

Watch dogs are kept by all flockowners. Makrán is famous for its greyhounds, especially Panjgúr. The Baloch headman has a mania for keeping them, chiefly owing to the amount of game which they pick up, thus keeping him supplied with fresh meat. A really good animal which can catch a ravine deer fetches from Rs. 80 to Rs. 100, while the price of those used for coursing hares varies from Rs. 15 to Rs. 40. Instances are quoted in which owners of a first class dog have refused to part with it in exchange for two camels.

The dogs kept are the bûr and tâsi. The former are the long haired variety used as watch dogs and by shepherds. Greyhounds (tâsi) which are said to have been originally imported from Arabia are very popular with Makranis, and the wealthy possess breeds which are much prized. Instances are quoted of camels and even horses being exchanged for greyhounds. Great care is taken in crossing, and puppies are carefully nurtured, cooked, not raw food being always given to them. When full grown, they are used in pursuit of deer. The most numerous variety is of the short coated sort; the Persian Greyhound (pushi) with long hair on its ears, etc., is found in smaller numbers. Greyhounds are generally used with the help of trackers who put the game up.

Makran enjoys a considerable reputation as a camel breeding country and produces some very good specimens. Indeed camel breeding and camel owning may also be called a passion with the Baloch, and every household possesses one or more.

Kulánch is one of the best breeding grounds in Makrán and herd owners (bagdár) are numerous. Many transport animals can also be collected there. The largest owner is one Dádén Bízanjau; but the Bands, Sangurs and Jadgáls are also engaged both in breeding and in the transport trade.

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Dogs.

Camels.

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The total number of all camels in Kulánch (1904) is estimated at some 2,000 animals. Dasht is famous for its riding camels, it probably possesses about 2,700 camels of all sorts and the largest owners are the Dashti, Latti, Birdi, Lagor and Langási. The lérau or full grown camel of Kolwa is well-known for its size and strength and fetches good prices. The locality is said to contain some 1,500 camels, the largest breeders and owners being the Bizanjau, Sangur, Kolwái, Korak, Rakhsháni and Koh-Baloch. Buléda probably possesses about 600 camels, the owners being Rakhshánis, Koh-Small numbers are to be found Baloch, Barr and Tájozais. in Nigwar, Mand and Bálgattar and also in Kéch. In Panigur, the Barr Kasháni, Shambézai, Singozai, Deháni and Gurgnári are the principal breeders and transport owners. Panigur camels are bought and taken to Sarawan by the Bráhuis in large numbers, as, of all Makrán camels, they alone are hardy enough to stand the cold of the highlands. Assuming the numbers above to be correct, the total number of camels in Makrán is probably not more than 10,000.

The owners mentioned above generally tend the animals themselves or employ their dependants to do so; in a few cases they employ graziers called *bag-jat*. The payments made to them are given in the section on Wages.

Riding camels are to be found everywhere and the dominant classes, the well-to-do Baloch, and the local traders always keep them. They are in fact the most common riding animal, horses being scarce and expensive. Special care is taken with regard to their feed, and a ration of grain (kadim) is given to them daily besides fodder. During ámén they are fattened with dates.

Horses.

Horses are scarce and are of no special breed. The reason is apparently to be found partly in a prejudice which Makránis have hitherto exhibited to riding mares and partly to the unsuitability of much of the country to the horse, especially of the coast tracts where no good fodder is to be had. The only stock which appears to have ever attained a local reputation was that of the Kalmatis. The number of mares in the country is still insignificant. A good many horses of an inferior type have been imported from Persia and other parts of Baluchistán in recent years, and nothing

pleases a local beau so much as to be mounted on a neighing, snorting, ambling stallion.

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Donkeys.

The breed of donkeys is remarkable for its fleetness rather than its size, and wonderful stories are told of donkeys making the journey from Turbat to Gwadar in a day. The best come from Persian Makrán, where much attention is given to breeding and high prices are paid for a breed known as barri which is imported from the littoral of the Gulf of Omán. They fetch from Rs. 150 to Rs. 200 each. The custom of the headmen in Persian Makrán riding donkeys while their following are mounted on horses, is a constant subject for jokes among the Kéch gentry.

Much merchandise is carried on donkeys from Panjgur and Zamuran to Pasni and other places, and the donkey is largely employed by the cultivator of irrigated lands for collecting manure.

The donkeys are bred by the Nakibs, Darzádas and Loris, stallions being kept by the last named. The Baloch are averse to breeding.

A considerable trade is also carried on by the wandering Loris who bring donkeys from across the Persian border and exchange them in Makrán.

The Makran bullock is small and generally brown in colour. The cultivators generally breed sufficient for the plough, and Kulanch and Nigwar are the only places where a few are bred for sale in other localities. Those of Nigwar are much sought owing to their toughness in the plough.

The bullock is not used for carrying in Makran and the custom is said to be very old, a curious survival of Hindu feeling in a Muhammadan country.

Buffaloes are to be found in Kéch, at Osháp, and there are a few at Awárán in Kolwa and a few with the Sangurs along the coast. The Kosag from Báho bring many buffaloes into Kéch at their periodical migrations and the milk, curds, etc., are sold by their women.

As a grazing ground Makrán compares favourably with other parts of Baluchistán owing to the large uncultivated tracts which it contains, in most of which fodder is plentiful. Large numbers of sheep and goats are everywhere to be found, but the former are probably most numerous especially in Panigur.

Cattle.

Buffaloes,

Sheep and goats.

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The Makráni flock-owner classifies his flocks either as siáh-pas, i.e., goats or ispét-pas (dropping the 't' in pronunciation) i.e., sheep. The indigenous goat is a black one with long hair; the only other variety met with is the Malabári, chiefly along the coast and occasionally in the interior. It is kept at home and is much valued for the large supply of milk it gives. The breed is said to have been imported by the Méds from Malabár. The sheep of the country is of the fat-tailed kind and of different colours; white is most common, black comes next to white as regards numbers, while browns (bor) and greys (kirg) are found in about equal numbers. The wool of brown and grey sheep is not sold by the Baloch, but is kept for making overcoats (shái). A four-horned sheep, generally white, is peculiar to Dasht and Nigwar.

Goats and camels are shorn only once during the year and each animal produces about a seer of hair. Sheep are shorn twice a year and produce about 2 seers of wool at each shearing. The only article in which there is much trade is sheep's wool which was selling at Rs. 10 per standard maund in 1903. Camels' hair was selling at Rs. 6-10-8 and goats' hair also at about Rs. 6-10-8 in the same year.

Calendar of the flockowner.

The Baloch flock-owner divides his year into four seasons, bahárgáh, which lasts from February to April (this period differs from the bahárgáh of the cultivator); bashshám from May to September; chén, or the shearing season from October to the middle of November; and simistán from November to January. Bahárgáh or the spring is the flockowner's paradise, and at the end of February, he emerges from the shelter of the glens in the hills round Panigur or from the villages in Kéch to feed his flock in the fresh pasture brought up by the winter rain. He shears his sheep, goats and camels at the beginning of March and at the end of the same month, and at the beginning of April lambing begins. now has plenty of milk which he makes into shilanch or condensed whey, paner or fresh cream cheese, and butter from which ghi is manufactured. The flocks go dry about September. At the beginning of the bashsham he moves towards the permanently inhabited tracts (shahristán) to be ready for the date harvest and at this time he pastures his flocks in the neighbouring hills. By the time of the second shear-

ing season he has moved to the place which he intends to make his winter quarters and where he will be well sheltered from the gorich wind. At this time the second shearing of the sheep takes place. The goat and camel hair is reserved for domestic use in blanketing for tents, sacking and ropes. The ghi made during the summer is sold to the local banias at the rate of 11 to 2 seers per rupee.

AGRICUL-TURE. .

The prices of various animals differ according to their quality and age. Those mentioned below are for average each kind of full grown animals. The price of a loading camel varies from Rs. 40 to Rs. 50 and of a female from Rs. 35 to Rs. 40. A riding camel can be bought for Rs. 60 to Rs. 75. Ponies can be purchased for from Rs. 45 to Rs. 60; a horse costs from Rs. 200 upwards. The price of a pair of bullocks varies from Rs. 50 to Rs. 60 and of a cow from Rs. 20 to Rs. 25. A cow buffalo fetches from Rs. 40 to Rs. 60. donkey of the barri variety whether male or female fetches from Rs. 60 to Rs. 75. The price of an ordinary donkey is from Rs. 15 to Rs. 20. A sheep fetches from Rs. 4 to Rs. 5, and a goat from Rs. 2-8 to Rs. 3.

Average value of animal.

Except in the neighbourhood of Turbat and Panigur, Makran abounds in pasture: indeed it may be described as one vast pasture ground. The valleys, the beds of rivers, and the courses of streams abound in grazing, a fact which has led to the immigration of many tribes of Brahui origin which have taken up their permanent abode in the country.

Pasture grounds.

Flocks can be pastured everywhere but the Dasht; Kulánch, Kolwa, Buléda, Parom and Rakhshán valleys are among the richest grazing tracts. Kolwa especially has two excellent pasture grounds in Marrah, between Gushánag and Zik, and Léngari Drug, between Bazdád and Awárán. is an area of closed drainage in the east central part of Kolwa; the latter is flooded by the Wahli stream and its confluents. The grass in both localities is known as drug, (Eragrostis cynosurioides) that of Marrah attains a height of 4 or 5 feet. In favourable years the place with its high waving grass fringed by a jungle of kahúr trees and filled with herds of sheep, camels, cattle, and buffaloes besides numerous horses, all browsing on the rich pasture, presents a most animated scene. Up to 1903 the Mirwaris levied grazing tax in Marrah, but this is now taken by

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the local administration. Among river basins, those of the Gwárgo, the Kíl, especially Osháp, the Gish, the Tagrán, the Kulbar, the Shádi and the Rumbar are best known, and among mountains, Zámurán. As indicating the absence of fodder in the neighbourhood of the head quarter stations, it may be mentioned that by the end of the time that the military force was in Panjgúr between 1891 and 1893 the whole of the neighbourhood had been cleared of fodder to feed 150 animals.

No difficulty is experienced in feeding cattle in Makrán, for a fairly large portion of the cultivated area is irrigated and besides karab, bean and millet straw and small quantities of lucerne are available. Kásh (Saccharum spontaneum), dil (Cyperus esculentus), barshonk and many other grasses afford good fodder for bullocks, cows and buffaloes. Sheep and goats eat kándár or baun, gor-káh (Ischæmum angustifolium), putronk; dil, kásh, pútár, gomas (Allium sphaerocephalum), sundum, maghér (Rumex vesicarius) and makánkúr. Goats and camels browse on the kunar (Zisyphus jujuba), kabbar (Salvadora oleoides), kahúr (Prosopis spicigera) and chigird.

Cattle diseases. A few of the more common diseases known to the cultivators are mentioned here with the object of assisting any one who may undertake the study of them at a future date.

Among horses colic (dard) is of somewhat frequent occurrence and often ends fatally. Branding or the administration of dates kneaded in ghi are the usual indigenous remedies employed. Another disease peculiar to horses is called jaugir one of the symptoms of which is said to be the contraction of the muscles of the chest. Branding or bleeding in the chest or fomentations with hot water are employed as a remedy.

Among camels the *mérrant* and *murgok* are the most dreaded diseases. The characteristic of *mérrant* is a gradual decline. Cow's milk and pounded turmeric are given internally and the animal is kept warm. In *murgok*, the animal's neck becomes stiff and contorted and death generally ensues within three days. In cases of itch, which attacks sheep and goats as well as camels, segregation is resorted to and a decoction made from *gú-gass* leaves, a variety of tamarisk, is applied externally.

Besides the itch, the most common diseases among sheep and goats are *riho* or purging accompanied by symptoms of dysentery, *kullok*, cough and *limpishk* or cold. *Riho* is considered most dangerous and no remedy is known for it. Change of pasture generally cures *limpishk* and *kullok*, and they are not regarded as dangerous.

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Bullocks and cows attacked by the latter ailments are treated with inhalations of sesame oil and sometimes with a mixture of cow's milk and sesame oil.

The people are not expert either in diagnosing or curing cattle diseases and the help of Brahuis is generally sought for the purpose.

As in other parts of Baluchistán, cultivation can, therefore, only be practised with certainty when the scanty rainfall is stored by natural or artificial means. Some of the principal staples, including dates and rice, depend entirely on permanent irrigation. Hence the importance of the káréz, kahn as it is known in Makrán, and of the open channel (kaurjo). The only other sources of supply of permanent irrigation are wells. In 1904 there were 127 kárézes and 118 large kaurjos (this number not including smaller ones which are numerous especially in Zámurán and Panjgúr), and 76 wells.

Irrigation. General conditions.

Lands in which spring crops are raised require to be irrigated in the autumn, when they are ploughed, smoothed and prepared, and occasionally during December and January, but regularly during February and March to bring the crop to maturity. Land cultivated with autumn crops needs irrigation from February to July for sowings and constantly thereafter till the crops ripen. Rice especially requires continuous watering.

The importance attached to irrigation from kárézes may be gauged from the Baloch saying: "A mosque should be demolished if it obstructs the course of a káréz." The system of excavating them is generally attributed by the present inhabitants to the Arabs; but, if the evidence afforded by the names attached to the Káúsi and Khusravi kárézes, to which reference has been made in the section on History, is of any value, kárézes must have been known and used in Makrán in times far anterior to those of the Arabs.

Sources of irrigation The Káréz.

Scientific explanation of the kárés.

As a source of irrigation, the káréz is so important that the following extracts from an article on kárézés by Mr. R. D. Oldham, of the Geological Survey of India, may be quoted: "As the theory of the káres is a matter on which much misconception is prevalent, it will be well to treat of it briefly. The ordinary explanation is that an underground spring having been discovered, a series of shafts connected by tunnels is made, by which the water is brought out to the surface. This idea of an underground spring is extremely prevalent and owes its origin to the description of the natives who have frequently told me that the water entered their káréses from springs. I have scrambled through the underground passages of some of these kárézes to investigate the matter and have found, as might be expected, that the description is a natural but misleading one. In a few cases the kárés does appear to derive its supply from what may, without great impropriety, be called an underground spring. * * * * Such cases are, however, very exceptional, and, as a rule, the explanation, both of the real facts and of the origin of the misconception regarding the action of the káréses, is very different.

"As the káréses are never lined in any way, it is impossible to drive them through incoherent material charged with water; it would, moreover, be unnecessary to do so, as, if an incoherent bed of sand or gravel charged with water were once struck, the supply would amply satisfy the desires of kárés-diggers. The káréses, then, after they enter ground charged with water, can only be driven through stuff which is rendered coherent by a greater or less admixture of cementing material. But this cementing material not only renders the ground firm enough to form the sides and roof of the tunnel, but lessens the permeability of the ground and, what we are more concerned with, makes it irregularly permeable. When the kárés is driven through such a deposit, the water will first of all drain away at those spots where it is most permeable, very probably washing out the fine-grained matrix and forming a small channel penetrating to a greater or less distance from the sides of the tunnel. Into this channel water will percolate and, instead

^{*} Records of the Geological Survey of India, Vol. XXV, Part I, 1892.

of oozing from the sides, enter the kárés principally at certain defined spots, giving rise to what are called springs. The origin of the commonly held idea is thus naturally and easily explained, but to call these 'underground springs' is a misnomer and as misleading as it would be to apply the same name to an ordinary surface well.

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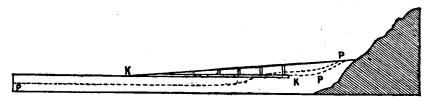


Fig. 1.

"Having stated what is not, it is now necessary to describe what is, the correct explanation of a kárés. In Fig. 1. a diagrammatic section of one of the gravel slopes is represented, the dotted line P. P. represents the limit of permanent saturation, that is the limit below which the gravels are always charged with water even in the driest season. Such a limit exists everywhere, but the form of its contour depends on a variety of conditions, such as the rainfall, discharge of streams at the head of the fan, permeability of the gravels, etc., which need not here be considered in detail. Now, if the káréz K. K. is driven into the slope, that portion of it which lies below the line P. P. will drain the sub-soil of its water and discharge this at the outlet. It will be seen from this, that in its nature and mode of action the kárés is only a sub-soil drain; in both cases the object is to bring water, which lies underground, to the surface, the only difference being that in the one case it is tried to obtain the use, and in the other to get rid, of the water.

"From the nature of the case these káréses are affected by the rainfall in a marked manner—a single dry season, and, still more, a succession of years of deficient rainfall, causes a diminution in the discharge of the kárés. Last year (1890) the falling off of water-supply was very widespread and, so far as the diminished discharge was only due to the dryness of the season, was not altogether an unmixed evil, for it led to an energetic cleaning out and in some cases lengthening

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of the káres which will improve its ultimate capacity. In a new káres, however, the failure may be due to another cause, which is more serious, as it permanently affects the supply of water, and may make this fall so low as to lead to the abandonment of the kárés.

"When the kares K. K. in Fig. 1 is first made, water will flow freely into it from the surrounding gravels in all that portion which lies within the original limit of permanent saturation. But, after it is completed, a new outlet is provided for the sub-soil water, the limit of permanent saturation will adapt itself to the new conditions and ultimately settle down with a profile which may be represented by the line P. P. P. The subsequent history of the kares will, now, depend on the relative importance of the causes which led to the sub-soil water originally maintaining its level along P. P. P. If the gravels were tolerably permeable and a considerable supply of water was constantly percolating through them, the kárés will settle down to a fair or abundant discharge. If, on the other hand, the amount of water percolating was very small and the level of permanent saturation kept up by the impermeability of the gravels, the ultimate condition of the kárés will be one of very small discharge.

"The amount of labour spent on some of these káréses and the depth of their numerous shafts, is astounding; they are frequently miles in length and the shafts near their heads are said to be in some cases 150 feet deep. This is doubtless an extreme case, but, when examining the Quetta plain, I found that in many cases the shafts at the head of those which drain from the hills, east of the valley, could not be plumbed with the 70 feet line I carried with me. These must have taken many years and cost large sums to excavate, but it is probable that the whole was not made at once, and that they were gradually lengthened at their upper ends, where they are deepest, out of the profits derived from the water which the original shorter channel yielded."

There are no local experts in kárés digging; in fact new káréses are seldom, if ever, excavated. The numerous old ruined káréses, which form so peculiar a feature of Makrán and bear indisputable testimony to the prosperity of the country in the past, afford ample scope for the efforts of the

people and they execute the work by a system of co-operation which will be presently described. Professional kárés-diggers from across the border called kannás or kannát are seldom employed therefore.

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Repairing old kárézes.

The excavation and repairing of an old káréz is an expensive business and it is generally undertaken in combination by the co-sharers in the land in which it lies If the ruined káréz belongs to another person, he is invited to take a share, and if he is unable to do so according to the custom of the country, he ceases to have any rights in the kárés. He is entitled to no compensation, nor can he stop the work. Nearly every káréz in Makrán is divided into 12 hangáms and, assuming that this will be the quantity of water obtained, each co-sharer undertakes to find so many labourers (nafar) per hangám in proportion to the share to which he will be eventually entitled. The number of labourers found per hangám is two. A joint manager called kahn-é-sarishta or kahn-é-dehkán or kahn-é-gazir in Kéch, jo-é-pit in Buléda, and kahn-é-kauhdá in Panigur is also selected to supervise the work as remuneration for which he receives 1 or 2 hangams free of labour. In Panigur it is customary for the owner of each hangam to pay the manager from 6 to 18 seers of grain at each harvest. This is termed mirbahri or roch-é-sari. sarishta continues to supervise the working of the karés after the re-excavation has been completed, and the appointment is hereditary. If a sharer fails to supply his share of labour, he is fined 4 annas per day per labourer by the sarishta and the fine-money, called ishkand, is distributed among the other workers. The original channel of the old kares is followed and no compensation is paid to the owner of cultivated land, or of a house, built subsequently to the abandonment of the káréz, to which damage is done. If he wishes for a diversion he must do it at his own expense. A peculiarity of Makrán kárézes is the cementation of the soil in which they are excavated. The underground channel is said to become almost stonelike in hardness and it is probable therefore that the water level is not lowered by constant cleaning.

The land under a káréz is known as dayát and is distributed by lot in proportion to the hangáms of water. The

State, as will be explained in the section on Land Revenue, has a right to 2 hangáms of water and a proportionate quantity of land in every kárés which is thus re-excavated.

Areas under kdrez irrigation. A large area is subject to kárés irrigation, including Kéch proper, i.e., between Apsar and Násirábád on both sides of the Kéch Kaur, Tump, Mand and the tracts between Isai and Washbod in Panjgúr. Kolwa possesses only two small káréses, but the frequent sites of ancient káréses indicate that they were very extensively employed as a means of irrigation in former times. In Buléda, Dasht and Kulánch there are none. A large extension of kárés irrigation could doubtless be obtained with a moderate expenditure of capital.

Many of the káréses have a large supply of water, but the Ussai or Khusravi, the Káúsi and the Sohragi in Kéch, the Tump Káréz in Tump, and the Shakarak and Warrámbúd in Panjgúr, are famous for the abundance of their supply.

The kaurjo.

Next to the kárés, in order of importance, is the kaurjo or artificial open channel supplied from pools (gwarm) in the river beds. The same reliance cannot be placed on a kaurjo as on a kárés as a single year of short rainfall causes a deficiency of supply in the former, and continued drought will dry it up altogether while káréses seldom run entirely dry.

Kaurjos are constructed by the same system of co-operation as káréses. Care is taken to select a shallow pool to avoid the danger of diverting large floods into the channel, and scours subsequently made are filled up with the same object. The lower end is dammed to retain the water which percolates into the pool from underground and the supply is augmented from any other similar pools which there may be in the neighbourhood. It is not customary for any compensation to be paid to the owner of land through which the channel passes.

A considerable area is irrigated by kaurjos in Kéch proper, Sámi, Tump, Mand, Pidárk and Panjgúr, and Buléda wholly depends on them. The water of the springs and other sources of supply in Zámurán is also conducted in open channels.

Among the largest may be mentioned the Nok-kash in Kaush Kalát; Kirmán Diz in Tanzag, a village between

Kaush Kalát and Kalátuk; Ginna in Kalátuk, Sámi Kaurjo in Sámi; Kisáno and Khushkába in Tump; Chib-ékaurjo and Jawán-mardán in Buléda; and Duzzán-ápkaurjo, Noigo, Shakarak, Johlo and Afzalábád Panigur.

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The cleaning of water-channels is done on the same Maintenance re-excavation, each shareholder supplying labour under instructions from the sarishta. A curious custom obtains known as chuk lughati or "the trampling of the child "which consists of a tip expected by the labourers from all travellers whose path crosses a kárés or kaurio which is under repair and from visitors who come to see it.

of kárezés and kaurjos.

Only two systems of water-lift are in vogue, both of which have been recently introduced. They are dhénkali and galgali. The former are most numerous, numbering seventy-one in 1904. and are the bucket-lifts common in India. The bucket used is a leather one. In Turbat, dhénkali lifts are constructed on the kárés channels to irrigate lands above those to which the flow of the káréz reaches, but in Sámi and Mand, where the water is near the surface, they are used for wells.

Wells.

The galgali system has been introduced from Sind into Kech, rapidly becoming popular. The lift consists of a leather bucket with an elongated tube at the bottom, and its principal advantage consists in its requiring only one man to work it. The bucket is drawn by bullocks over a pulley and a second rope attached to the voke opens the end of the tube automatically on the arrival of the bucket at The bucket can be worked either by two the surface. bullocks or one. The cost of paraphernalia required, including the woodwork but not the cost of excavating the well, is about Rs. 25. All but one of those now at work (1904) are in Kéch; the remaining one is at Dizz in Parom. A lift worked by a pair of bullocks can irrigate enough land to cultivate 21 standard maunds of seed which, in a good year, will produce 60 maunds.

An impetus has been given to the extension of well cultivation of late by the reduction of the rate of revenue payable on land irrigated by wells by half. There appear to be no reasons why well cultivation should not be extended in places where water is near the surface, such as Kéch

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proper, where a good supply of water is to be found at a depth of 18 to 54 feet, in Sami, where it is 18 to 24 feet below the surface, and in Mand, where it is from 6 to 18 feet. Sami, Tump and Mand are also suitable for the use of the Persian wheel. In Kulanch, Dasht and other dry crop areas, especially those in Panjgur, the water level is deep and the soft soil is an obstacle to the construction of wells.

Dams.

There are only five insignificant dams in Makrán, viz... Nílag-é-bandgáh, Gauragi Band, Mandi Kaur Band, Kauhdáé-band, and Ahmad Khán-é-band. Nílag-é-bandgáh is an old dam across the Nilag stream in the Kasar rés of Dasht and most of the cultivation of Kasar depends on it. Gauragi Band irrigates Bal rés in Nigwar. Mandi Kaur Band consists of a series of three small dams across the Mandi Kaur Kauhdá-é-band is somewhat larger than those mentioned above and has been constructed by Kauhdá Muhammad Khán, Barr, across the Gwargo river in Kohbun, but it was out of repair in 1903. The Ahmad Khán-é-band in the Rakhshán valley near Nág-é-Kalát was in a similar state. The dams are badly engineered and constructed, and are easily damaged by heavy floods. Many places exist where earthen dams could be made and large areas brought under cultivation thereby. Tradition speaks of large dams in former times in the Kil Kaur at Thatagár near Osháp; in the Sawar river in Kulanch at a point called Tank-é-Sawar: and in the Rakhshan near Kuhna Kalat. The latter was known as Band-é-Gillar.

Division of water.

Permanent sources of water are divided into a number of shares, the principal being the hangám. The number of hangáms in a day or night differs at various places and at various times of the year, but it is usually $3\frac{1}{2}$ hangáms for each, or 7 hangáms in the twenty-four hours during summer.

The minor divisions of a hangám in common use differ slightly in Kéch and Panjgúr. They are indicated as below:—

I. Kéch. The lowest unit is a tás.

```
      1½ tás
      ...
      ...
      ...
      = ném abba.

      2 ném abba
      ...
      ...
      = 1 abba.

      1 abba
      ...
      ...
      ...
      = 1 ném tassu.

      2 ném tassu
      ...
      ...
      = 1 tassu.

      2 tassu
      ...
      ...
      = 1 ném hangám.

      2 ném hangám
      ...
      ...
      = 1 hangám.
```

11. Panigur. The lowest unit is a bad.

> 4 pad ... = I ném tassu. 2 ném tassu ... = I tassu.

2 tassu ... = I ném hangám.

2 ném hangám ... = I hangám. ...

Before giving details of the method of distributing the minor shares of water of a permanent source the main divisions may be explained. As a rule the water of a permanent source which belongs to the owner is divided into 12 hangáms, to which are added the 2 hukmi hangáms belonging to the State or other revenue takers, thus making an aggregate of 14 hangáms. Owing to the necessity of frequent waterings to minimise evaporation and for other reasons, the whole supply is usually divided near the mouth of the kárés into two equal channels by a water-divide known as tagir. Each channel or tagir now carries 14 hangams, thus doubling the share of each owner and enabling him to obtain his share of water in two turns at short intervals rather than in one turn after a long interval. Lower down, each tagir is divided into as many smaller channels (giro-band), as there are blocks of lands contiguous to each other. For the distribution by individuals, a garrok, or stone water-stop, is assigned to each.

The main distribution is fixed by lot under the supervision of the sarishta who has been already referred to, when the source of supply is first opened, but individual turns are settled by lot at the beginning of each summer when much water is required for rice cultivation. As remuneration for making the distribution, the sarishta first takes the whole supply of the káréz for twenty-four hours to his own lands.

A peculiarity of Makran is the water clock which is used Distribution for the distribution of water during the night or on cloudy days. When the sun is visible an ingenious system of dialling is used as in other parts of Baluchistán.

The water-clock, which is known as tás-o-áb, consists of a metal bowl, that in use in Kéch being 3 inches in diameter and 2 in depth. A tiny hole is made in the centre of the base and the bowl, which must be thoroughly clean, is allowed to float in a basin of water. The time which it takes to sink is I tas: three dies of the tas make I abba or nem tassu; and 24 make 1 hangám, as in the table given above.

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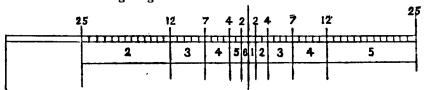
by the water clock at night.

The day or night, however, is divided into $3\frac{1}{2}$ hangáms, and in order to adjust the difference of half a hangám, or 12 dips, the hole is slightly enlarged, so that the bowl sinks 28 times in 1 hangám. Thus the 24 tás which there are theoretically in 1 hangám are actually divided into 28 portions, or 7 dips for every tassu.

The owners take it by turn to work the water-clock each night, and each man receives 2 dips (pash bandi) for each hangám as his remuneration. This is managed by taking out the bowl before it is quite full, thus making 30 dips in all per hangám. The same system of pash bandi exists also in the case of the distribution by day.

Distribution by day. The dial. The system of distribution by day in vogue on the Júsak Káréz may be taken as typical of the rest of the country. Details, indeed, differ constantly, but the principles of distribution are the same everywhere.

The division is done by dialling in a carefully levelled space. The pointer, known as mohr,* is a straight stone, 1'-7" high. The day is divided into many tassus, the first of which is completed when the shadow of a man standing over the mohr reaches a point 25 paces from the centre†. The second tassu is completed at the twelfth pace, the third at the seventh, the fourth or one hangam at the fourth space, the fifth at the second and the sixth when there is no shadow. The process is graphically illustrated in the following diagram:— mohr



Thus, in a day during which the sun is visible for exactly twelve hours, one tassu is equivalent to one hour.

^{*} Several expressions indicating periods of time in Baluchi have their origin in the use of the mohr. Thus mohr jata, literally the sun has struck the mohr, means that it is mid-day; while mohr gwasta means that it is past mid-day. Can Arrian have had the use of the dial in his mind when he refers to the absence of shadow in Gedrôsia at mid-day? Vide Anabasis, Chapter XXV.

[†] A pace for this purpose is measured by the two feet being placed one in front of the other.

The table at the beginning of this section shows that there are 14 tassus in $3\frac{1}{2}$ hangáms or one day. When dialling, however, 7 dips of the tás or water-clock to the tassu only are recognized, the whole number being equalized in the course of a day. Thus, $3\frac{1}{2}$ hangáms=14 tassus × 6 tás, or 84 tás, and 12 tassus × 7 tás=84 tás.

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The difference in the length of a tassu, due to the difference in the number of hours of light or darkness, is compensated for by each owner receiving his share of water by day or night alternately. It is only in the summer, too, that much use is made of the system; owing to the comparatively smaller amount of water required in the winter, accuracy in the distribution is hardly required.

A somewhat similar system to that in vogue on the Júsak Káréz obtains in Turbat, but here the day is counted from the first notes of the nightingale in the early morning, known as bulbul-é-báng, and its close at murghai drang or the time the cock goes to roost. The Júsak system is, therefore, admittedly more accurate. It is popular in Turbat as it enables the two extra tassus, making up the total of 14, to be fitted in, one before sunrise and the other after sunset.

In Shahrak where, owing to the scarcity of water, accuracy is essential, a man's shadow is not used but the shadow of the dial stone, and an accurate comparison is made with the water-clock, each tassu being marked by a peg. In the Nilán Káréz at Shahrak, where there are 4 tás in a tassu, the summer day is calculated at 10 tassus and the night at 6 tassus, calculations which are reversed in winter.

In Kech during winter water is divided into 4 tassus for the day and 4 tassus for the night, and 4 tassus make a hangám. Each tassu is, therefore, equivalent to about 3 hours, but the night tassus are longer than those of the day, as the night hangám begins from the namás-é-asur about 5 p.m. and lasts till about 6 a.m. The reason for the altered distribution and the assignment of larger shares is that the climatic conditions only require each man's crops to be watered at intervals of not less than seven and not more than sixteen days.

The system in vogue in Panjgur only differs from that prevalent in Kéch in the number of dips to a tassu. The

Division in winter.

System in Panjgúr. AGRICUL-TURE. turn which the shadow of the *mohr* takes in receding or advancing one pace during the middle of the day is considered as equivalent to a *tás*. The lowest unit is *pad* and 2 *pads* are equal to $1\frac{1}{2}$ Kéch *tás*. The rest is the same as in Kéch.

Fisheries.*

The fish and fish-eaters (Ichthyophagoi) of the Makrán coast drew the attention of the earliest writers. So early as the time of Alexander the Great, the Ichthyophagoi were located on the coast to be succeeded in later times by the Méds and Korás, whose ranks are now-a-days constantly recruited from the poorer Baloch of the interior. They are financed by Khojas and Hindus from the Bombay Presidency.

The marginal figures for Las Béla will show how the

			Ormára. Rs.	Miáni. Rs.	panded in com- paratively recent
I, (Custo	ms contrac	t		times. They may
		for 1828	. 3,000	Not available.	be taken as typi-
2.	,,	1872	9,000	5,000.	cal of the remain-
3.	,,	1904-5	18, 100	5,412.	der of the coast
					also.

The value of the fish caught in 1905 on the coast of Las Béla alone is estimated at more than 2 lakhs. The progress of the industry may be attributed to the existing security of the coast, which was at one time infested by pirates, and to the opening up of new markets. The air bladders obtained from kirr and other fish find a ready sale in England for the manufacture of isinglass; sharks' fins are sent to China; and salt fishmaws are exported to India, Zanzibar and the coast of Africa. The fish which are most prized for their bladders are the kirr, mushko, galla or gallo, and sohli, and vast numbers of them are caught. Many varieties of sharks occur. Those from which white fins are got, are more valuable than those from which black are obtained. The carcases of kirr, mushko, galla and sohli are salted, after the bladders have been extracted. The other fish which are important for this branch of the industry are gor, pishak, pashant, sárum, kalgon, tiglam or tagilm, pálwár or palla, and

[•] The Editor is indebted to Mr. W. Troyal of the Indo-European Telegraph Department for much of the information included in this section.

sharks. Fresh fish abound, and are frequently unmarket. FISHERIES. able owing to the absence of means for transporting them fresh to large centres. One of the most numerous varieties is the sardine (lújar), which sometimes sells as cheap as 120 for a pice. Pomfrets and soles are also ridiculously cheap at certain times of the year.

The kirr or swach (Sciana diacanthus, Lacep) is about 3 feet long and 11 broad. It is a very scaly fish and is obtainable in large shoals from January to May. An account of the method of catching it will be found elsewhere. air bladder sells at 8 annas to R. 1 a piece. A salted side with the backbone (miri) sells at about 2 annas and is popular both with the people of the interior and the Méds.

The mushko or mushka (genus Scianoides) is about 12 inches long and 3 inches broad. It is found all the year round and is specially numerous from June to September and from February to March.

The cat-fish (galla or gallo-family Siluridæ) varies in length from 18 to 24 inches. Cat-fish collect in large shoals in February and are caught in March and April. During these two months the males carry the ova which the females have spawned at sea in their mouths. Most of them are caught while still carrying the ova, but some have the little fish just hatching. The fisher folk allege that at this time they go without food for forty days. Nearly 100,000 of these fish are believed to be caught every year at Ormára. The young are called khaggi and dubar. They are caught in large numbers with the hook and line, and children are sometimes to be seen on the Ormára beach hauling them out as fast as they can throw their tackle into the sea.

The sharks (paghás—genus Carcharias) vary in length from 6 to 18 feet and in breadth from 2 feet upwards. They are found all the year round. The best place for catching large sharks during the monsoon is said to be about 40 miles south of Ormára. Some varieties are valuable only for their flesh, which is not, however, used locally, while others, especially a long shovel-nosed beast with white spots, are caught both for their flesh and fins. Oil extracted from the liver is used for oiling the woodwork of boats. Small sharks, about 5 feet long, were selling on the beach

FISHERIES.

at Pasni in 1903 for about Rs. 2 each. At Ormára white fins, known as ránja, were selling at the same time at about R. 1 per lb., and black tipped ones, called mangar, at about half that price.

The gor is found all the year round, but particularly in the winter. It varies in length from 3 to 6 feet.

The sardine (lújar and lijar) is about 6 inches by 1 inch, and is found all the year round, but it appears at certain seasons in large numbers. The young called kuchchak are obtainable from June to September. It is consumed locally and is also used as bait. Persian immigrants sometimes eat it raw. Nearly every year, about August or September, a kind of disease appears among these fish and many fall victims to it, thousands of them being washed up on the shore causing an intolerable stench.

Fishing grounds.

The best fishing grounds are situated at the mouths of the rivers, where the small fish, shrimps, etc., congregate and fall a prey to the larger kinds. On the Makrán coast the best known places are Kalmat, Gazdán, Sur, Drabbelo, the mouth of the Ankára stream near Gwádar, Píshukán, the mouth of the Dasht river near Jiwnri, and Gwetter bay. Kalmat and Gazdán are famous for kirr, Sur for mushko, and Píshukán and Gwetter for gallo.

Boats.

The boats employed in the industry are the máhi-kush batél, the batél, the yakdár, and the hori. The most popular of these is the vakdár. The máhi-kush batél is used in fishing for kirr and is generally known merely as batel. carries about 100 bags and is beached during the monsoon. The batél is somewhat smaller than the máhi-kush batél and larger than the yakdar. It resembles the latter, and is used for carrying cargo along the coast, when not employed in fishing. The yakdár, which derives its name from the fact that it is made from a single trunk, is imported from the Malabar coast. For local use, a keel is attached to it and its gunwale is heightened. It is fitted with sails or can be rowed. The crew consists of three men in the case of a large yakdár, two men and a boy in one of moderate size, and of two men for a small one. The hori is a small rowing boat or canoe and is similar in construction to the yakdár, but is smaller and possesses no sails.

Fish are caught principally with the net; the hook and line is also used and occasionally the harpoon. takes place almost entirely at night except in the case of kirr and sardines.

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Medes of fishing.

Nets.

A net with a large mesh, known as arsi, is used for large fish such as sharks. It measures 480 feet in length and is 24 feet deep. The mesh is 8 to 12 inches square. Its place is taken on the Las Béla coast by the leh, known as pákhi in Miani, which is 75 to 100 feet long and 12 feet deep and has a mesh about 6 inches square. For catching smaller shark the rach rébi, referred to below, is sometimes used in Miáni.

The net most extensively employed, particularly in kirr fishing, is called jorau in Makrán and consists of a large seine made by joining 10 to 14 smaller nets, known as mahor, each about 96 feet long and 48 feet deep. The mesh is about four inches square and the string used in making it is very thick. As an auxiliary to this net, a square shaped net called jál, is used. It has a smaller mesh and is used for passing under the fish when they have been enclosed in the The rachdhak used in Miáni corresponds to the Makrán jorau. The jorau used in Ormára is only 75 to 100 feet long and 12 feet deep with a mesh 21 inches square.

A third net used in Makran for kirr and fairly large sharks is the rébi, 180 feet long and 18 feet deep. The nets employed for gor fishing in Makran include the darband and rebi. The corresponding net used in Las Béla is the rach rébi, a large net 900 to 1,500 feet long and about 12 feet deep with a mesh two inches square.

Smaller nets, used for pálwár and mushko, are the riju and rébi. The riju is 180 feet long and 18 feet deep; the rébi 75 to 100 feet long and 12 feet deep. Another net, the rach, is 180 feet long and 18 feet deep and has a smaller mesh than that of the riju.

For very small kinds of fish, such as sardines, the casting net called rug is used. It is a circular net 10 to 15 feet in diameter and is weighted with lead all round.

The nets are made either of cotton, hemp, or flax. Manufacture Cotton thread (bandik) is either spun from thread imported from Kulanch and other places in the interior; or imported from Bombay and Karáchi. The thread manufactured from

of nets.

FISHERIES.

the indigenous cotton is said to be more durable than the foreign material. Hemp is imported from Bombay and Karáchi. The thickness of the thread varies with the purpose to which the net is to be applied.

The price of cotton thread varies from Rs. 4 to Rs. 5 and that of hemp from Rs. 3-8-0 to Rs. 4-8-0 for 11 lb. Hemp nets last for a year or so and cotton ones longer. The average cost of a small net is Rs. 5 and of a large net Rs. 8. Hemp nets are rather cheaper.

Cotton nets.

In making cotton nets, each skein is first unravelled and made into balls of single threads. This is the most tedious process in the making of a net and takes most time. Two or four threads are then spun together according to the thickness required, and three or four of these strands are again twisted into the string of which the net is to be made. Before manufacture is commenced, the string has to be soaked in water and stretched and all superfluous twists removed, so that it may neither kink in working nor twist up when set in the water, a defect which renders nets quite useless. After the string is ready, a quick worker does not require more than a couple of days to finish a net with a wide mesh. Nearly every member of the family whether man or woman helps in one way or the other and a net of 75' x 12' is completed from beginning to end in about a fortnight. When the net is completed, it is soaked in water and kept stretched for a while to tighten any knots that may have been loosely tied. It is afterwards limed.

Cotton nets cannot be set in water for more than three days continuously without risk. On first use they are taken out at the end of this time and, after being well washed with fresh water, are dried. They require to be limed, however, as described below after each subsequent setting.

Hemp nets,

In making hemp nets, the process slightly differs. Before the net is begun, the string is immersed in water and stretched round two trees at a little distance from one another. It is then lightly mopped over with an old piece of net or string to smooth the surface and remove the kinks, that it may work freely. Hemp nets last only half as long as the cotton nets, but their comparative immunity from the harm caused by salt water renders them more serviceable. They can be kept in water for six or seven days continuously without

risk and turn out nearly the same amount of work as the cotton nets during the time they are in use.

For liming, the net after being washed in fresh water, is Liming nets. placed while still wet, in an iron pan containing milk of lime which is kept boiling continuously for three days, water being added as required. The net is then taken out, stretched and laid flat on the ground to test its fitness. If it shows the slightest tendency to twist, it is again boiled till it lies perfectly flat. This is done to soften and strengthen the net so that when placed in water it may hang perfectly straight and limp without twisting. Hemp nets require to be limed after each setting. Fishing lines are subjected to the same process.

The lime used is made from shells only, as stone lime is harmful to the material. It is manufactured at Kalmat and the method of preparation is extremely simple. The shells are collected on the ground in small heaps 2 or 3 feet high and are well covered with wood which is set on fire and allowed to burn down. When cool, the ashes are removed from the pile into small baskets made of dwarf palm, about 18 inches long. After being filled, the baskets are placed in sea water to slake. The price of a basket of this lime containing some 3 seers, is about 1 anna; larger ones are sold from 11 to 2 annas according to quantity.

All nets are used with floats (bhái) made of a kind of cedar wood produced locally. Ends made from date wood are also used but sparingly, as they sink after being some time in water. Large floats are sold at Rs. 1-12-0 and small ones at Rs. 2-8-0 per 100. Dried gourds also make useful floats.

Three kinds of hooks and line are in use: the pághás kundi, the rada kundi, and the chirdáni kundi. The first is used for catching large sharks: the second for smaller sizes of sharks, kirr, and other big fish; and the third for small fish. The hooks used with the first are always of local manufacture: those used with the second are usually so; the third are English. The harpoon, called kábur in Ormára and dappho in Miáni, is used on the coast of Las Béla for sharks. All fishing lines are waterproofed with a paste made of the pods of gishtar (Leptadenia spartium). They are crushed whole, and the paste is well worked into the line with the hands till it becomes quite smooth and of a light almond

Floats.

Hooks and lines.

FISHERIES.

brown colour. The colour deepens to a darkish brown and sometimes to black when it comes in contact with water. The process also prevents a line from twisting while in the water. One application lasts for about a year. In Miáni, sap obtained from the galls of the tamarisk is used for the same purpose.

Setting the nets.

Nets set in deep water are simply laid in a straight line and anchored at both ends. They are taken up after two or three days. Those set near the shore are arranged so as to form angles. The belief is that fish in deep water, on meeting the nets, try to pass through them. A few pass through and generally tear the nets in so doing, but cannot escape; most get caught by the gills.

In the case of corner nets, the fish on meeting the net, run along it, making towards deep water where the angle is made. Finding the angle, and seeing the net on either side of them, they get confused and try to force themselves through when most of them get caught at the angle. Sometimes a single long net is set in the form of an obtuse angle with a second bisecting it at the apex. The fish, when swimming, strike the bisecting net, and run along it till they get caught in one of the angles on either side. This method is much used for gallo fishing at Chahbár.

Kirr fishing.

A watch is kept for kirr from December in Miani and from January at places further westward on the coast. Fishing is done by several boats together, and as soon as the reddish tinge, which denotes the presence of a shoal of kirr, is observed, a flag is waved and all the boats start in pursuit. The fish are now surrounded, each boat taking up a position and lowering its nets so as to surround some portion. As soon as a ring of nets has been run round the shoal, another net, the jál or jhál referred to above, is passed underneath the side nets, thus bringing the fish to the surface. Sometimes as many as eight or ten thousand fish are caught at one time. If the boats are unable to take them all, the bladders only are extracted and the carcases are thrown into the sea. The fish in each boat are counted, under the orders of the skipper of the fleet, with the aid of a string, each knot on which represents fifty fish. In a good season, one set of boats will generally make three voyages to the kirr fishing grounds.

Sharks (pághás) are caught both with nets and with the hook and line. When netting them, a spot is selected which abounds with small fish, which act as bait. When Shark fishing the hook and line is used, a couple of yards of steel wire are attached to the line next to the hook to prevent the sharks from biting the line and escaping. Boats engaged in shark fishing generally leave the coast at midnight. arriving on the fishing ground at daybreak, when they fish for a few hours and return home before sunset. Fishing takes place while the boat is under sail. If a large shark is hooked, the sail is lowered and it is played till it is tired Smaller ones are pulled in while the boat is still moving. On approaching the boat, the shark is speared and a mug of fresh water poured down its throat at the first opportunity, to hasten its end. The sharks caught are often very large and cannot conveniently be lifted into the boat. In such cases the boat is tilted with the aid of another boat and water is allowed to run into it till it is sunk to the level of the water, when the fish is lifted into the boat and the water quickly baled out.

Bait for shark fishing consists of small live fish, 3 or 4 inches long, such as the kábloshk and tántár.

On the boats arriving at the shore, duty is levied by the authorities usually at the rate of one fish in every ten.

After this the remainder of the catch is divided between the fishermen and the capitalists who have financed the undertaking. At Gwadar, the Khoja capitalist receives 5 per cent. of the total catch for providing the boats, and half the balance for the nets. Out of the latter amount, a portion is set aside for the skipper. The remainder of the catch is distributed in the proportions shown in the

Skipper (Nákhuda) ... 3 shares Mate (Sarhang) ... 2 shares Each sailor 13 shares

margin. A single share is also set aside as a reward for any man who has done specially good service or run

great risk. The capitalist then takes over each man's share at a cash rate, which, however, owing to the predominant influence of the capitalist, is generally about 20 per cent. below market rates.

A somewhat different system prevails on the Las Béla coast, the catch at Ormára being divided equally between FISHERIES.

Payment of duty and division of catch.

FISHERIES.

the fishermen and the owner of the vessel and nets. The former in their turn subdivide their shares into equal parts. a boy receiving half as much as a full-grown man. If the owner of the boat and of the nets are different persons, the former receives one-sixth of the total catch and the owner of the nets half of the remaining, the other half being divided among the boatmen. In Miani, where the large batél is much used, the capitalist is invariably the owner of the boat and the nets, and the catch is divided in equal shares between him and the fishermen. The latter, after deducting the advances made by the capitalist for food on the trip, subdivide their moiety into an equal number of shares, two of which are given to the skipper. Gadáni, half the total amount is paid to the owner of the nets, and the other moiety is divided into equal shares between the owner of the boat on the one hand, and the fishermen on the other. This is due to the rocky nature of the fishing grounds which causes much wear and tear of nets.

Curing.

Curing yards (bakhár) are owned chiefly by Khojas. Their proximity is quickly ascertained by the dreadful stench arising from them.

On the arrival of the fresh fish from which the air bladders are to be extracted, they are placed before parties, each member of which is supplied with a knife and a vessel full of water. The scales are first rubbed off and a cut is then given from the left gill to the upper end of the backbone followed by another vigorous stroke downwards to the tail. With another cut, the carcase is completely opened out, and a gash on the right side finishes the operation. Parallel cuts are then made along the whole length of the body to enable it to absorb the salt.

The fish is next passed on to the salters who well rub it with salt, after which it is thrown into a pit full of sea water where it ordinarily remains for a day and night, but longer, when it has to be exported to distant places. When sufficiently soaked, the carcase is deposited in another pit above the first to allow the salt water to drain off into the latter. After lying for a short time in the upper pit, it is dried in the sun. The air bladder (phota) is merely washed in salt water and then dried.

Salt fish is exported to Karáchi, Bombay, the Malabar coast and Zanzibár. From the coast of Makrán it is sent to Kéch, Dizzak, Panigúr and other places, and from Miáni to Las Béla, Jao and Ornách. Pieces of dried shark, pághás ká chappar, are largely exported to Zanzibár where they find a ready market and sell at Rs. 8 per cwt. local price of sharks' fins, which are exported to China, was Rs. 50 per cwt. in 1893 and Rs. 55 in 1903. Catfish (galla) are popular on the Malabár coast where they sell at Rs. 8 per 100; pishak, when opened by the belly, is also exported to the same place, but, when opened by the back, it is sent to Colombo. Air bladders are specially valuable. A dried fish will sell for 2 or 3 annas, whereas the bladder fetches 6 to 8 annas or even R. 1. The prices at which a hundred of the more important fish were selling locally, after being salted, in 1893 and 1903 are given below :---

FISHERIES.

Export.

Sale price of fish.

						1893. Rs.	1903. Rs.
Kirr	•••	***	***		***	25	30
Sohli	•••	•••	•••	•••	>**	20	30
Sárum	•••		•••	•••	•••	. 15	20
Gallo	***	•••	•••	•••		8	8
Tagilm	•••	••	•••		•••	7	8
Pishak	***	•••	***	••	- > •	5	7
Mushko	•••	•••	•••	***	•••	2-4	3

The different kinds of tenants will be described in the section on Land Revenue Rent consists in a share of the produce. Cash payments on account of rent are AND PRICES. unknown.

RENTS. WAGES

In Kech, when Zangis are employed, they work in parties of three or two men, the eldest and most experienced being known as mehtar, the second as hambun, i.e., one who is entitled to a share equal to that of a mehtar, and the third as némbun, i.e., one who is entitled to half a hambun's share. For each of them a portion of land is set apart by the proprietor; for the first a plot calculated to produce 12 Kéch maunds of grain at each of the principal harvests; for the second one calculated to produce about 10 maunds and for the third one calculated to produce 5 maunds. Such fields are called meshat. The proprietor also finds seed, bullocks, etc., for the cultivation, the Zangi being

Rent. Rates of rent in Kech. RENTS, WAGES AND PRICES. responsible for the labour only. Where there are date trees on the land, the Zangi receives a special share of the produce under one of two systems. Under the first system, the mehtar and hambun each gets the produce of six trees, and the némbun either that of one tree or as much as he can eat. Under the second system the mehtar and hambun either get a small basket of dates (kapát) containing some 3 seers of dates and half the dates which fall outside the blanket into which the dates are shaken from the tree, daily during the date season, or the whole of the dates which fall on the ground. If the date fruit is gathered into plucking baskets, that which drops also forms the share of the Zangi. In addition to the above the whole party of Zangis are also given one-eleventh share of the total produce of the land they cultivate. The payments made to Zangis fall, therefore, under the category of wages in kind rather than under that of rent.

In those cases in which rents are paid by division of the produce, varying systems prevail in different parts of the country, but, as a general rule in dry crop areas, one share is set apart for the land, one for the labour, one for bullocks, one for the seed and one for making the embankments. This system is known as panchiki. It is not invariably followed and much depends on the quality of the land and the general facilities for cultivation. Thus on bug or pir bug land, which means land near the banks of torrents, on er-apag, i.e., land on the sloping banks of a stream, on which embankments are not required and which is fairly certain to be flooded twice a year, and on kuch or gwash, i.e., low lands formed in the beds of streams by alluvium, the némag system prevails, the tenant supplying seed, bullocks, labour, etc., and giving half the produce to the proprietor.

Another system is the seh-yaki, under which the landlord owns the land and bullocks and the tenant supplies the labour and seed, the former receiving two-thirds and the latter one-third of the produce. Under another system, cháraki, where the owner supplies land, seed and bullocks and the tenant only labour, the former receives three shares of the total produce. In Kolwa, tenants in the Kauhdái

or Khán's and in the Mírwári area pay one-seventh of the produce as nésto; in the Bízanjau area the rate is one-tenth; while in the Naushérwáni tract one-seventh is paid by tenants together with a number of cesses (rasm). These include wakil, at the rate of about I seer per standard maund, náib, mubdai, sar-ahor and dái at the rate of 5 seers per 6 standard maunds, and kadim which is taken for the proprietor's horses. Where embanked land is let to a tenant for cultivation, the rate of nésto is generally one-sixth. In cases in which a tenant sublets an embanked field he generally receives one-seventh as nésto.

Rents, Wages and Prices.

Rents in Panjgur.

In the irrigated lands of Panigur the general rule is for one-third of the produce to be assigned to the owner of the land and water, one-third for the bullocks and seed, and one-third for the person providing the labour, half the farmyard manure and the whole of what is known as holim. Holim consists of the green tamarisk branches which are largely used as manure for the rice fields for providing which the cultivator has to keep some donkeys. In the case of dates, however, only one-fourth of the date produce is allowed to a tenant. The division sketched above is not, however, the invariable rule and a tenant, though he supplies all the requisites for cultivation, except the land and water, often only gets half the produce. Another kind of arrangement is for one-third of the grain to be assigned for the land and water and the remainder of the grain and all the bhúsa, karbi, etc., to go to a tenant, who supplies all the other requisites for cultivation.

A man who makes a dam in a stream acquires by so doing a right to one-fourth of the produce of the land watered by the dam.

A sub-tenant or baddi is given 60 to 120 Panjgur maunds, of the produce*, two-thirds in dates and one-third in grain, as well as food, two pairs of cotton trousers and one overcoat (shál).

The rent realised on Crown lands, which are dry or flood crop, also includes the revenue, and the general system followed is detailed in the section on Tenants. In the case of the Crown khushkaba lands at Apsar only one-tenth is

Rent in Crown lands

[•] i e., from about 3 maunds 16 seers to 6 maunds 32 seers, standard measure.

Rents, Wages and Prices Wages. levied, but in the same class of land between Kalátuk and Churbuk the rate is one-fifth.

In most cases wages are paid in kind, and cash remuneration is the exception rather than the rule. Cash wages are not, therefore, regulated to any large extent by the economic causes which affect them in large industrial areas.

No cooly class seems to have hitherto existed, but, with the opening up of the country, the small demand for unskilled labour which has sprung up is generally supplied by the Darzádas and servile classes who work at a daily rate of 3 to 4 annas. The supply of such labour at the busy agricultural seasons is at such times limited and immigrants (darámads) from Dizzak in Persian territory are employed instead of local men. A few orphans descended from liberated slaves or Darzádas are also to be found in service as agricultural labourers, employed in carrying manure to the fields, keeping watch over the gardens and other similar duties. They are usually fed and clothed by their employers and are paid from 4 to 8 annas a month. At harvest time, however, they are given a dole of from 6 to 12 Kéch* maunds of grain instead of the cash.

Of artisans, the weaver generally turns out different varieties of cloth at certain fixed prices per piece. If he manufactures to order, a fixed rate of remuneration is determined with the employer beforehand. No shoemakers work on daily wages. Brick laying was formerly done by forced labour (bigár) obtained from the cultivators who formed the following of the owner of the house or fort, but masons (bán-bandoks) are now sometimes employed, who are paid from 8 annas to 1 rupee per diem. There are no local masons, but men come from Dizzak periodically to undertake such jobs. Kárés diggers, called kannát, also come from the same place.

Bricks, which are usually of large size, are made at the rate of Rs. 1-4-0 per thousand, but in the case of a large demand, e.g., for ten or twenty thousand bricks, the labourers are usually paid for one or two thousand less than the number which they supply.

Carpenters (dár-tarásh), other than village servants, sell the article they manufacture at fixed prices. For shaping rafters and beams, unskilled labour is employed.

One Kéch maund=12 seers.

Kárés diggers are paid by contract; day labour is not employed for this purpose. The rates of wages paid to fishermen have been noted in the article on Fisheries. The carpenter who is employed as a village servant is known as nangári or langári (i.e., plough-maker). He is supplied with wood by the cultivator, and his wages consist of 12 seers standard of wheat and 12 seers of rice at each harvest.

RENTS, WAGES AND PRICES.

The gastr, who is generally a menial servant of the náib or the sardár, acts as the latter's agent for collecting impressed labour, and performs multifarious duties connected with the land. Formerly his wages consisted of 12 seers of corn at each of the spring and autumn harvests and the fruit of one date tree per hangám of water, while his perquisites considerably added to his income, but his remuneration now appears to have been reduced by nearly one-half.

The blacksmith (lori), who makes agricultural implements and keeps them in repair, receives the same remuneration as the village carpenter with the addition of one sar-é-hosha or load carried on the head, per hangám of water in irrigated lands. Formerly he was also given the fruit of one date tree, but this practice appears to be falling into disuse. He supplies iron for sickles, knives, etc., but for special articles, such as horse-shoes, he is given the iron by his employer.

Cowherds are generally engaged by the year and are given one sar (4 annas) for every female calf born during the year. At the end of six months they also receive one sar per cow. They are supplied with food, and I seer of dates a month and the produce of one date tree at the date harvest. Kéch village shepherds are generally given their food, one dánk per month (6 pies) for every goat they look after, the wool or hair of the animals he tends, one loaf and 2 seers of laghati dates every two months, and the produce of one date tree from each owner of five or six animals at the ámén. Panigur, shepherds are engaged by the year and are given their food, five lambs (two male and three female) for every hundred sheep they tend, and occasionally clothes. clothes consist of a hair coat (duppi), a sheet (chádar), and a pair of trousers. Camelherds in Panigur receive food, clothes and Rs. 8 annually for every fifty camels handed over to them.

Cowherds and goatherds. RENTS, WAGES A'D PRICES. The mulla. No fixed proportion of the annual produce is set apart for the benefit of the mullás in Kéch. The landowners, who attend the mosque of a particular mullá, generally give him I maund 8 seers of grain per annum. The mosque usually possesses an endowment also, and the mullá's income is supplemented by fees for marriages and funerals and by presents made by the father of any children who may attend the mosque for education. In Panjgúr those who attend a mosque give the mullá one-tenth of their produce.

Zikri mullás lead an easier and more independent life than others, due to the sanctity with which they are regarded and the numerous offerings they receive from their flock.

Saiads make periodical tours when the people always present them with gifts varying from an eight-anna piece to 12 seers of grain.

Prices.

In a country where nearly the whole of the inhabitants are dependent on the land, where wages are paid in kind, and commercial transactions are carried on by barter, only an insignificant proportion of the population is affected by the price of staple commodities. The staple foods of the people are the date, surrat (Andropogon sorghum), wheat, barley and rice, and, along the coast, fish. The price of dates has been mentioned in the section on Agriculture under "Trade in Dates." In 1903-4 the prices of cereals in seers per rupee were as follows:—

]	Kéch.	Kolwa.	Panjgúr.
Zurrat	•••	•••		••		16	16	16
Wheat	•••			•••		16	16	15
Barley			•••		•••	25	20	18

The prices of food-grains naturally vary considerably according to the rainfall and the season of the year. Zurrat or Juári has sold in Kéch during the last few years at 16 to 20 seers per rupee, while in Panjgur the average price has been higher. The price of wheat at Turbat has of late years been approximately as follows:—

							Seers.
Year.						p	er rupee.
1900	***	***	***	••	•••	•••	16
1901		***	***		•••	***	16
1902	***	***	•••	•••	***	•••	12
1903	•••		•••				18
1904-5	•••	•••	***	•••		•	24

In 1904-5 owing to good rains and an abundant harvest, the rate was more or less stable throughout the year at 24 seers per rupee. In the Panjgur valley the wheat outturn is small, and most of the wheat is imported from Kéj, Dizzak and Sarawán. The rate of barley has varied in Kéch from 25 to 36 seers per rupee. In Kolwa the barley is of a superior quality and hence fetches a higher price.

RENTS, WAGES AND PRICES.

The prices of fish are given under "Export" in the article on Fisheries in this chapter. The prices of such staples as are produced in exportable quantities, as for instance dates and fish, have in recent years shown a tendency to appreciation owing to the expansion of trade brought about by the tranquillity of the country and facilities of transport.

Local traders assert that about the time of the British occupation wheat sold at 30 seers per rupee and barley and juári at 1 maund per rupee, and it is evident, therefore, that the general levelling of prices which is going on throughout India with the development of communications is making itself felt in Makrán also.

The standards of weight in Makran differ in almost every locality. The following are those in use in Kéch, Dasht, Kulanch and Zamuran:—

WEIGHTS
AND
MEASURES.

```
      Ném rubb (the lowest unit)
      = 1 chittack.

      2 ném rubb=1 rubb
      = ½ seer.

      2 rubb
      = ném kiás
      = ½ seer.

      2 ném kiás=1 kiás
      = ½ seer.

      2 kiás
      = ném man
      = 6 seers.

      2 ném man=1 man
      = 12 seers.
```

In Kolwa and Panjgúr the lowest unit is the seh-kiás which is equal to $4\frac{4}{5}$ chittacks. The following is the table employed:—

```
2 seh kiás=1 shish kiás 9\frac{3}{5} chittack.

4 seh kias=1 ném man =1\frac{1}{5} seer.

2 ném man=1 yag man =2\frac{2}{5} seers.

4 ném man=1 do. man =4\frac{4}{5} seers.

5 ném man=1 do. man-ném =6 seers.
```

In Mand, the man contains 16 standard seers, in Pasni 6 seers, in Gwádar 5\frac{1}{3} seers, in Sámi 10 seers, and in Tump and Buléda 4 seers. The terminology employed is identical with that used in Kéch. In Pasni and Gwádar, British Indian standard weights are used side by side with the indigenous weights.

WEIGHTS
AND
MEASURES.

Grain and other commodities are sold by weight everywhere, except in Kolwa and Gichk, where wooden measures, known by the generic name of kail, are used for transactions in grain. Their capacity is equivalent to the different units mentioned above. The kail is made locally of tamarisk or kahúr wood, and can be purchased at prices varying from 2 annas to R. 1 according to size and quality. It is not tested by the authorities.

Troy weights. The following is the table of Troy weights. The lowest unit is the kapoti:—

r kapoti = ratti

7 kapoti = 1 gaddag (i.e., a date stone).

2 gaddag = 1 ném misqál.

2 ném misgál = 1 misgál.

31 misqál = 1 tola.

There are 2 rattis more in a Makran tola than in an Indian one, 1 tola containing 98 kapotis as against 96 in India. The same units are applicable to trade in silk, with the difference that a tola of silk contains 4 misqáls.

Miscellaneous measures. The general measures of capacity whether for grain, fodder or other bulky articles, are hushtir-é-bár, a camel load, and har-é-bár, a donkey load. A man's load of any grain crop except rice with the stalks in ear is called grám; in the latter case it is known as a shálpát. Small quantities of grain are termed dast-é-dil-é-kach, a quantity filling the hollow of the palm, musht, a fistful, lákot, half a handful, and chank, an open half handful.

Liquid measures. No liquid measures are in use. Country oil, ghi and date juice are sold by the Avoirdupois weight.

Linear measures. Cloth measures are of two denominations, the dast and the arish. The dast is an indefinite measure which varies with the stature of the customer and is measured from the projecting bone of the customer's elbow round the end of the middle finger, when extended straight, to the upper knuckle joint. It averages about 1 foot 10 inches or 1 foot 11 inches. In some localities it is measured up to the wrist joint when it is 2 feet 3 inches or 2 feet 4 inches. The arish is an iron rod about 1 foot 10 inches to 1 foot 11 inches in length and is divided into 4 equal units called chár-yaki, i.e., a quarter. This system of measurement is in most common use, but a Baloch always tests the accuracy of the rod by comparison with the dast.

No superficial measures exist. The measure of extent commonly employed is the gam or pace, and is about 3 feet In Dasht, two other measures are in vogue known as the gwáns and sád. The gwáns is the distance between the tips of the middle fingers of a man's arm held horizontally and measures about 6 feet. One sád, literally a rope, is equal to 24 gwáns. This is called the Gichki sád. as it was introduced by the Gichkis; the local sad is equal to 22 gwáns. The gwáns is used by the people of the coast in speaking of the depth of water. When measuring fish, resort is had to the bichal, of about 9 inches.

WEIGHTS AND MEASURES.

Superficial measures.

Indefinite superficial measures are tuhmjá and kaur dap. The former is in use both in Kéch and Panigur and the latter only in Kolwa. Tuhmjá denotes area in which a given amount of seed can be sown. Kaur dap refers to an area of cultivated land situated at the mouth of a hill torrent and cultivated by it.

The distances of journeys are generally expressed by stages of a laden camel (hushtir-é-massil) or a horseman's march or half march (sowar-é-roch-é-rah, or sowar-é-némroch-é-ráh).

time.

Time is reckoned by lunar year. A period of thirty years Measures of is called karn. In Zámurán, the Zoroastrian calendar was in use about fifty years ago, but now the Arabic calendar is used throughout. The seasons recognised by the cultivators and the flockowners have been described in the section on Agriculture. Saturday is the first day of the week, and the local names of the days are shamba, Saturday; yakshamba, Sunday; do-shamba, Monday; seh-shamba, Tuesday; chár-shamba, Wednesday; panch-shamba, Thursday; and jumaa, Friday.

The following are the periods of the day and night:—

VERNACULAR. EXPLANATIONS IN ENGLISH. Sohb Morning.

Nahári-é-wahd Breakfast time, between 9

and 10 A.M.

Ném-roch Noon. Bégáh Afternoon. Shám ... Evening.

Sar-shap First period of the night.

Ném-shap Midnight. ...

Vernacular. Explanations in English.

Lunj ... After midnight.

Mazan-é-gwarbám or mazan-é-bángwa. Early dawn.

Bám or Bángwa ... Dawn.

Short periods of time are the sáat or hour, damán, jhat, pal and katra, the last four having no exact value.

Currency.

WRIGHTS

AND

MEASURES.

The currency now (1904) in common use is the British Indian, silver and copper. The nomenclature used differs from that of other parts of India and is as follows:—

LOCAL NAME. ENGLISH NAME. Ném dánk ... Pice. Dánk Half-anna. Ném zarr (sometimes also called sháhi) ... Two-anna piece. Four-anna piece. Zarr, gabarr or pao Ném kaldár, ném rupai, do-zarr, do-gabarr, or } Eight-anna piece. do-pao.

Kaldár or rupai ... Rupee.

The smallest copper coin current is the pice.

Prior to the advent of British currency, various foreign coins were current, the most common being the Muhammadi sarr, commonly called sarr, equivalent in value to 4 annas. The patell, called gabarr in Panigur, a Persian coin of Fateh Ali Shah's time, was also in use and of the same value as a sarr. The abbast, of the time of Abbas Safavid, was also current, but is now scarce.

In more recent times the Portuguese dollar was popular and was known as kurash in the interior and riál on the coast. It has now been replaced by British Indian coin and is only in use in Gwádar and Persian Makrán; but even in these places it is fast disappearing. It has lost much in value, and its exchange value at Gwádar is now Rs. 1-4 instead of Rs. 2-4 as formerly.

A Maskat pice is current in Gwadar. The rate of exchange is 3 for 1 British Indian pice.

A gold coin called *sohr* and valued in 1903 at Rs. 7-8 is occasionally to be seen. It is known to the people as *sitarámi*, and is apparently a Venetian ducat. Reproductions of these ducats are made both in Makrán and at Karáchi.

Coin is not plentiful in the country, whence much business is carried on by barter.

There is little to be said about the material condition of the people. Everything is still in its most primitive state, and there are few signs of improvement. Brick houses are taking the place of mat huts in a few cases, and European piece-goods are being substituted for the coarser cloth previously manufactured in the country. With the exception of the few Gichkis and other members of the dominant class, who own estates, and some of the Khojas on the coast, wealthy men, as a class, are not to be found.

MATERIAL CONDITION OF THE PEOPLE.

The rest of the people, whether landowners, tenants, flockowners or herdsmen, have few requirements, and even so, the produce they obtain from their occupations leaves them little or no margin.

The dress of a landowner, which has been described in the section on **Population** costs a total sum of about Rs. 5-12-0 to Rs. 6-12-0, that of a flockowner about Rs. 4-8-0 to Rs. 6, while a shepherd is content with a pair of trousers, a sheet and a shál, the aggregate price of which does not exceed Rs. 2-8-0. Shoes are a luxury which few can indulge in, nearly all the people confining themselves to dwarf-palm sandals. The houses are miserable places consisting of a single room, and the most expensive does not cost more than Rs. 100. Mat huts or blanket tents still form the dwellings of many.

The articles of domestic economy are few and inexpensive. Their furniture is scanty and the earthenware utensils used are primitive. A cultivator is content to eke out his existence with 2 hangáms, and a flockowner, who owns 300 sheep, is considered to have ample means of livelihood.

The district possesses no reserved forests, nor are there any fuel or fodder reserves. Some well-wooded areas exist in parts of the country, but they bring in no income to the State.

The more extensive areas are mostly covered with kahúr, chigird, kabbar and tamarisk, but they are not closed to grazing or felling, and their denudation is proceeding apace. They are:—

- (1) Sarinkin Tad, a narrow strip of jungle between Tump and Kalátuk.
- (2) Sar Dasht in Kulanch.

FORESTS.

FORESTS.

- (3) Marráh in Kolwa.
- (4) Khán-ai-Kahúrdán in Parom.
- (5) Sháhbánz jungle in Dasht-é-Sháhbánz.
- (6) The Gichk jungle in the Gichk valley.

Wooded tracts of minor importance are to be found in Mand, Bálgattar, Lad-é-Apsar near Turbat, the Buleda valley, parts of Kolwa and Robar near Jiwnri. Areas covered with tamarisk, but of no great importance, are to be found in the beds of the Kéch, Kíl Dasht and Nihing rivers. Some of the trees are of good size.

The trees which grow to a good size are the *chish* (babúl) which occurs in Kulánch, and the kahúr which covers the Robar round Jiwnri. The kunar is fairly abundant, the kalér, the shirish and the karag are not so common.

Minor forest products.

The minor forest products include dwarf palm, asafetida, gum obtained from kahúr, chish and chigird trees, and the medicinal drugs called gurdir and isgind. With the exception of pish, they are met with in comparatively small quantities and are economically unimportant.

Písh.

Pish (Nannorhops Ritchieana) or dwarf palm is a stemless, gregarious shrub, common on rocky ground up to about 3,000 feet. It grows extensively on the slopes of hills and in beds of rivers and streams.

The uses to which pish is put are many and various; indeed there is hardly any purpose to which it is not applied by the people of the areas in which it grows. The leaves are used in the manufacture of matting, fans, baskets, caps, sandals and other articles for local use. Ropes are made from the leaves and leafstalks, but are not as strong as those made of munj. The delicate young leaves, which have a sweet astringent taste, are in great repute for the treatment of diarrhœa and dysentery. The heart is eaten uncooked as a vegetable in times of scarcity. The seeds are strung as rosaries and exported from Baluchistán to Arabia. stems, leaves and petioles serve as fuel; while the reddish brown moss-like wool of the petioles, called purs, after being dipped in a solution of saltpetre, is employed as tinder for matchlocks. A rude kind of drinking cup is made of the entire leaf by tying together the tops of the segments. Ropes and mats made from pish are exported to Sind and other parts of the Bombay Presidency.

No systematic investigation has ever been made into the mineral resources of the country, and the only mineral of present importance (1904) is salt. Aluminium sulphate, mixed with iron sulphate (mak), is obtained from a mine near Shamál Bandar, and is used for producing a black dye. It is carried into the interior where it is bartered for equal weights of grain. The production is taxed at the rate of 8 annas for a camel load of 5 maunds and 4 annas for a donkey load of 2 maunds. There is a sulphur mine near Mázwár Kaur in the neighbourhood of Pasni. A chemical examination of water from springs at Kallag in Kulánch indicated the presence of a large amount of sulphuretted hydrogen.

Mines and Minerals.

Salt.

Salt is manufactured at Pasni and Gwádar, and is obtained by the evaporation of sea or rain water at Shinzáni, Pingo and Gwando near Pasni, at Kalmat, and at Jámu Ták and Sarhor near Jiwnri and at Túro near Gabd. Good salt is also gathered after rainfall from the kaps of Kolwa, Bálgattar, and Parom.

Salt is also obtained at Wád-Rop near Pasni. There are two pools at this place containing, it is believed, salt water springs, the water in which seldom exceeds a depth of 3 to 4 inches. Every fortnight the salt which has formed in the pools by the evaporation of the water is gathered. The yield is generally from 45 to 55 maunds at one time; the annual outturn being about 1,500 maunds. In 1903 the salt was sold at a fixed rate of 3 maunds per rupee. It is said that the best yield of salt is obtained during the months of March to May and September to November. The number of pools has since been increased to 15, but salt is at present obtained only from the two original pools.

At Gwadar, there are salt pans along the shore into which salt water is poured from wells, the salt being gathered after evaporation has taken place. It is considered of good quality and usually sells at 6 annas per maund. The manufacture is financed by the local Khojas, who estimate the annual outturn roughly at 2,000 maunds. The exportation of salt from Gwadar is prohibited by the local officials, and the supply is used locally in salting fish or for domestic purposes.

At Shinzani, a small place about 16 miles west of Pasni, the outturn of salt is fairly certain. It is obtained by the

MINES AND MINERALS. evaporation of sea-water brought in by high tides and the production is said to be nearly 600 maunds annually. It is of an inferior quality and sells at a fixed rate of 4 annas for a maund.

At Pingo and Gwando, which lie east of Pasni, the supply which is obtained in the same way as at Shinzáni is uncertain, but when a high tide reaches either place about 150 maunds are produced. The two salt tracts at Kalmat consist of low lying ground which, when filled with rain water, yield nearly 3,600 maunds. They are sometimes not filled for several years in succession. A monopoly for the manufacture and sale of salt produced at Pasni and Kalmat was given for Rs. 365 for the two years ending with May 31, 1905. Pasni salt is bartered in Kéch with banias for half its weight in dates, and banias in their turn barter it in equal proportions with grain other than wheat.

The supplies at Jámu Ták, Sar Hor and Túro are also obtained by the evaporation of sea-water. When Jámu Ták is flooded about 800 maunds are obtained; 350 maunds are got from Sar Hor under the same circumstances, and 50 to 60 from Túro. Samples of Jíwnri salt analysed in 1904 indicated a purity of 91 9 per cent. of sodium chloride.

The supply from Kolwa, Balgattar and Parom is entirely dependent on the amount of rain water received. In a good year, Kolwa and Parom are estimated to yield 4,000 or 5,000 maunds, and Balgattar about a quarter of this quantity. An analysis of the salt obtained from the Balgattar and Kolwa kaps gave a purity of 91.8 and 86 per cent. of sodium chloride respectively.

ARTS AND MANUFAC-TURES. Makran has never been famous for its arts and manufactures, as the few requirements of the people do not encourage a sale for industries. Moreover, the artisan leaves his work in harvest and seed time to attend to his land, which is not beneficial to the manufactures. He is also very poor, owing to the lack of capital and raw material, and spends much of his time in collecting fallen date fruit or begging for grain.

Weaving. (Cotton and Silk). The manufactures of Makran are all handicrafts, and amongst them cotton weaving has always held a prominent place. Háji Abdun Nabi mentions that in 1838 there were 100 weavers in Tump and 1,000 in Turbat. This industry

ARTS AND MANUFAC-TURES.

is now, however, dying out, owing to the introduction of European cloth, which is not only in common use with the well-to-do, but is being more and more utilized by the middle and poor classes. The largest demand for local manufacture is in Kéch. The Panigur weavers, who are all Nakibs, are giving up weaving and adopting more lucrative trades. Even the Darzádas of Kéch, who are weavers also, are taking to agriculture. The weaver is called jolá, and works on daily wages, and is supplied with raw material by his employer. His implements are similar to those used in India, and his method is also very much the same. Some silk weaving is done, but the industry cannot be said to have progressed, and the raw silk is not grown locally, but most of it is obtained from Sarbáz in Persia. At this place the young worms are hatched in the spring and fed on mulberry or a plant called ganchak, if mulberry is not procurable. The process of cleaning the cocoons is very simple. They are washed and rubbed in a mixture of alum and water which has been allowed to stand overnight, and to which a little sesame oil and white of egg have been added. They are afterwards repeatedly immersed in boiling water, and the silk is thickly covered with ashes and put in the sun to

Eight different kinds of cotten and silk cloth are generally woven. Some of those made of silk closely resemble the fabrics made at Purneah and Chittagong in Bengal. They are known as man-o-bas, gushán, sohrén gulbadan, shúnsén gulbadan, ném sháhi, hukúb, nest-man, jahán and bist dasti.

Man-o-bas is a tartan in dark-green and light-green and dark-red and light-red squares. It is generally used as a head-cloth by both men and women. These head cloths are woven both in silk, in half silk and half cotton, and in all cotton. The pieces are woven 2 feet broad by about 6 feet long, and in order to make a head-cloth, three of these breadths are generally joined for a man and two for a woman. The price of a silk cloth is Rs. 12 to Rs. 15 for a man and Rs. 8 to Rs. 12 for a woman.

Gushán is made of half silk and half cotton, and is manufactured in short pieces about $3\frac{1}{2}$ feet by 2 feet. It is tied by women over the front part of the head under the head-cloth. Specimens, which are rather attractive, are generally

ARTS AND MANUFAC-TURES. a dark-green crêpe with a red border. One made of silk costs Rs. 1-4-0.

Sohren gulbadan is made in pieces 36 feet long by 1 foot 4 inches wide. The ground is scarlet with thin yellow and green lines. It is made either of silk or cotton, and is in common use for shirts and trousers among the women of all classes and men of the lower orders. The price of a piece or than varies from Rs. 10 to Rs. 12 in silk, and is about Rs. 2-8-0 in cotton.

Shúnsén gulbadan is a green cloth with a thin red stripe. It is only made of cotton and is manufactured in pieces of the same length as sohrén gulbadan. It costs Rs. 2 per piece.

Ném sháhi is plain red cloth. It is made in the same lengths as sohrén gulbadan, is used for the same purposes and costs the same price.

Hukûb is made of silk in the same lengths as man-o-bas and costs about Rs. 15 per piece. It is used principally for women's shirts.

Nést-man-jahán is a silk cloth used for making women's shirts and is spotted red or such colour as the purchaser may desire. It costs about Rs. 15 per piece.

Bist-dasti is a cotton cloth made in pieces about 30 feet long by 1 foot 4 inches broad, costing a rupee each. It is much used by the lowest classes.

Rugs.

A few rugs of somewhat inferior quality are also woven by Baloch women in the *dari* stitch. They cost from Rs. 5 to Rs. 30 each, according to quality. Baloch overcoats (shál) are also made at Rs. 1-8-0 to Rs. 5 each. A thicker fabric than the shál called *duppi* costs from Rs. 2 to Rs. 5.

Leather work. The common articles of leather manufacture are saddlery, men's and women's shoes, and sword belts with their accessories, such as pouches and bags for bullets and gunpowder. Persian saddles, with prominent pommels made by local shoe-makers and carpenters, were once in great request, but owing to the more frequent visits made by the well-to-do to Quetta, those manufactured in Kachhi and Afghánistán are now more popular. The leather is imperfectly tanned, dates and tamarisk and pomegranate bark being employed for the purpose. Reins and saddle cloths are occasionally embroidered in silk for those who can afford the luxury. The former cost Rs. 5 per pair.

Kéch contains the largest number of shoe makers, who are mostly Darzádas. The shoes made are clumsy; they are commonly worked in silk. A pair of men's embroidered shoes costs about Rs. 3, while women's shoes generally fetch Rs. 2 per pair. Embroidered sword-belts, in spite of the introduction of peace and security, are still in considerable demand and cost from Rs. 3 to Rs. 12 each.

ARTS AND MANUFAC-TURES.

A variety of patterns of embroidery are worked, and almost Embroidery. everyone wears some garment which has embroidery upon it. The parts of the dress which are generally embroidered are the front pockets and sleeves of the pashk (or woman's shift), the ends of men's and women's drawers, caps and coats. Bed sheets and the carpet bags made in Kolwa are also worked. Some of the needle work is very fine; the most common of patterns are known as sarsi, kash, cham-osrúmag, mosum and kappago mosum, chinuk or duz, bakkáli. tattuk, dagardoch, robar and chilako. The last three closely resemble one another.

Among minor industries may be mentioned pottery, wood work, metal-work, the manufacture of gold and silver ornaments and basket and mat-making. The vessels manufactured by potters are made by hand and are very coarse. The potter's wheel is not known. Long necked earthen jars, round pitchers, cooking pots and date jars (humb) are most commonly made, their price varying from 1 anna to 4 annas each. The potters are generally Darzádas. Glazed pottery is unknown.

MINOR IN-DUSTRIES. Potterv.

Carpenters are called dár-tarásh, and some of them Wood work. combine this trade with agriculture. Grain measures, bedsteads, door frames, planks and boards are in general demand. Their tools are of the most primitive description. The blacksmiths combine agriculture and farriery with their major occupation.

Goldsmiths are nearly always Loris and are paid at rates agreed upon between their employers and themselves. This industry is thriving, many kinds of silver and gold ornaments ' are made.

> Basketmaking.

The dwarf palm is largely used for the manufacture of articles of daily use, and nets and baskets of different shapes and sizes are woven. They are usually made either by women, or by sangis and nafars. Some of the baskets are

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INDUSTRIES.

so strong as to be employed in cleaning the beds of water channels. There is no trade in these articles, which are mostly manufactured for local requirements. Dwarf palm mats, however, are exported in considerable quantities. The fisherfolk of the coast are experts in the manufacture of nets and other kinds of fishing tackle, reference to which will be found in the section on Agriculture.

COMMERCE AND TRADE. Historical. Reference has already been made to the reputation which the people of Kesmacoran had in Marco Polo's time at the end of the thirteenth century, when they "lived by merchandize and industry, were professed traders, and carried on much traffic by land and sea in all directions." Doubtless such places as the rich and beautiful city of Pasni and Tez, in Persian Makrán, carried on a considerable trade, but the description of the people as "professed traders" is no longer applicable. The trade has now fallen almost entirely into the hands of Khojas and baniás from India. Caravans from Makrán, as we learn from the Tuhfat-ul-Kirám used to penetrate at one time as far as Cutch and Gujrát.

No further information as to the former trade of the country is forthcoming till the time of Háji Abdun Nabi (1838-9), who noted that the chief articles of merchandise brought to Gwádar were iron, powder, turmeric, English cloth, Bengal striped cloth, kandakee, dates, lead, silk thread, pepper, pedlery, mashroo cloth, sugar and rice.

Háji Abdun Nabi also speaks of an American ship touching at Gwádar in the year he visited Makrán and purchasing 450 rials worth of wool. The import duty then levied at Gwádar appears to have been a uniform rate of 3 per cent. ad valorem on a Musalmán's merchandise, and 4 per cent. on that of a Hindu. The produce of the Gwádar fisheries was taxed in kind, while that of other fisheries and imported fish were charged an ad valorem duty of 3 per cent. A small export duty, amounting to about 4 annas per load, was levied on all goods leaving for Bombay.

About the same time Masson speaks of the people of Kolwa maintaining an exchange of commodities with the ports on the coast, rice, dates, cotton cloth, spices and dye-stuffs being received in return for wool, ghi, hides and bdellium. The trade of Kolwa gravitated chiefly to Sonmiáni, while Panjgur dates found a good market in Kalát. Kéch maintained

commercial intercourse with Gwadar and Chahbar. Pasni appears to have been hardly recognised as a trading centre AND TRADE. at this time, its only export being a small amount of matting.

COMMERCE

Later records speak of commerce being much impeded by the insecurity of the roads, and that the trade continued to be very small as compared with the extent of the country.

> Existing trade. Classes engaged and modes of carriage.

At the present date, the trade of the country may be divided into five classes: (a) Foreign maritime trade; (b) foreign land trade: (c) maritime trade with Indian Provinces: (d) internal trade: and (e) trade with other parts of The chief centres of trade are Gwádar, Pasni, Baluchistán. Turbat and Isai. The classes almost exclusively engaged are Khoias and Hindus on the coast, some account of whose transactions has been given in the section on Population, and a few of the indigenous inhabitants and some Bábi Afghans in the interior. Besides the steamers of the British India Steam Navigation Company, the maritime trade is carried by native craft which make runs as far as the Malabár Coast.

From the ports, merchandise is carried into the interior chiefly by camels, but sometimes by donkeys. common, fish being exchanged for dates and dates for grain. Caravans bringing grain and tobacco visit the country from Dizzak, Máshkél, Ihalawán, Sarawán and Las Béla, and return laden with dates.

The imports and exports to the ports, afford a criterion of Character of the general character of the trade of the country. exports consist chiefly of salt-fish, fishmaws, shark fins, ghi, raw wool, goats' hair, hides, cotton, dates, and dwarf palm, raw and manufactured, while the imports consist of cotton piece-goods, silks, sugar, wheat, rice, iron, juári, country oil and kerosine oil.

In the category of foreign maritime trade is included the trade with ports in Turkish territory such as Basra, places on the coast of Arabia, chiefly Maskat, and with a few local-No registration of such ities in Africa, chiefly Zanzibár. merchandise takes place, but the article exported is chiefly dried fish, in return for which, dates and musk are imported from the Turkish and Arabian coasts. Slaves were formerly brought back from the coast of Africa, but the traffic has now ceased. With the opening up of a regular steamer

imports and exports.

> Foreign maritime trade.

COMMERCE AND TRADE.

service with Indian ports, that part of the foreign maritime trade, which was carried in country boats to Africa, has declined, but much cargo is still carried by local craft to the Persian Gulf.

Foreign land trade.

The foreign trade carried by land consists of merchandise passing between Gwádar and Pasni; and places in Persia, chief among which are Báho, Dashtiári, and Bámpúr. A little trade also exists between Panjgúr and Dizzak. The articles imported consist of raw cotton, dates, wool, raw hides, ght and grain, and the exports of salt-fish, piecegoods, sugar, silk and country oil.

Maritime trade with Indian Provinces.

The maritime trade with Indian Provinces is probably the largest item in the trade of the country. It is carried on chiefly with Karáchi and Bombay, but in a few cases goods are carried direct to Madras, Bengal and Burma. It is registered in India as trade with the Makran Coast and Sonmiáni: and unfortunately that from ports in Las Béla is not distinguished from merchandise carried from the Makran ports proper. In 1902-3, the total exports from all the ports on the coast, including those of Las Béla, were valued at nearly 7 lakhs, while the imports reached a total of nearly 61 lakhs. Details of the chief imports and exports have already been given. Dry salt-fish, fishmaws and shark fins compose the chief articles of export, but in a few cases, fresh fish is exported to some of the Portuguese settlements on the west coast of India. The exports do not, of course. consist entirely of local products, but include articles imported from Persian Makrán, which have already been mentioned under Foreign land trade. Formerly Gwadar was the port from which almost all the trade was carried, but since 1903, when the fortnightly calls of the British India steamers commenced at Pasni, a good deal of the trade has been diverted to this port, as evidenced by the rise in the customs contract. Some details of the trade with both places will be found in the Miniature Gazetteer.

Internal trade. The internal trade is insignificant and consists chiefly of the barter of fish and agricultural produce. Turbat and Isai are the centres of distribution, goods being imported by Hindu traders direct from Karáchi and Bombay. Turbat supplies the Kéch valley and Isai provides for Panjgúr and also Kúhak and Dizzak in Persia and Máshkél. The chie articles of imports are the piece-goods and silk which are generally bartered for ght, wool and dates.

COMMERCE AND TRADE.

The character of the trade with other parts of Baluchistán has already been mentioned and consists in the exchange of dates for grain or tobacco brought from the Sarawán country or for grain brought from Las Béla. Khárán sends wool and ghi to Panjgúr and takes dates and piece-goods in return.

Trade with other parts of Baluchistán.

The nature of the duties imposed on trade will be described in the section on Miscellaneous Revenues. Octroi (sung) is levied by the State at Isai, Turbat and Tump, and customs, including a tithe of fish, are taken at Pasni, Kalmat and Jiwnri both on imports and exports. At Gwadar, similar imposts are levied both on imports and exports at the rate of 5 per cent. ad valorem.

Octroi, transit and harbour dues.

The Khárán Chief has three thánas (1904) in the Rakhshán valley at Shíréza, Nág-é-Kalát and Kénagi Cháh, and two in Rághai at Kullán-é-dap (Pízg) and Tank. The rates levied are 4 annas per camel or camel load, and 2 annas per bullock or donkey, whether laden or unladen, and per sheep. They are only payable once for a journey by either route. Ghí and wool, when exported from Rakhshán and Rághai, pay special and much heavier rates.

MEANS OF COMMUNICA-TION. Roads.

Owing to the strike of the hills, the communications in Makrán from east to west along the valleys are generally easy and practicable; those from north to south, on the other hand, which cross the strike of the mountains, are difficult, only fit for laden camels in fair weather, but impassable for wheeled traffic, of which, however, Makrán possesses none. There are no made roads; the only bridle path is that from Pasni to Turbat, and thence viâ Buléda to Isai which was made passable for pack animals in 1904. The natural tracks generally follow the river beds, which, owing to the comparative absence of stones, are easier than those of northern Baluchistán.

The two great lines of communication from east to west consist of the route from Béla to Mand through the Kéch valley in the south, and the Kalát-Panjgúr route through the Rághai or Rakhshán valleys on the north. The latter is joined at Panjgúr by the Kachhi-Makrán route from Mashkai. After crossing the western border both the Kéch valley and

Means of Communica-

the Kalát-Panjgúr routes eventually converge on Bampúr, the former through Sarbáz and the latter through Kúhak, Sib and Magas.

From Gwadar the principal track to Turbat goes via Kulanch and the Talar pass, and a branch taking off from Biri runs from Kunchti Khurd to Tump. The road from Jiwnri to Turbat follows the valley of the Dasht river; this route is connected with Gwadar by a cross road via Gabd. On the east of the country a route which is considerably used is that between Béla and Panjgur. It takes off from the Kéch valley route in the Jao valley. Communication between Kolwa and Ormara is by difficult routes from Balor and Chambor across the Coast Range. The routes running from Panjgur northward to Mashkél or Dehgwar and northeastward to Washuk are dealt with in the GAZETTEER OF KHARAN. Details of the principal routes in Makran will be found in appendix VIII.

The main lines of communication from south to north begin from the harbours. The best, and now the most important, route is the bridle path already mentioned, which was constructed in 1904-5 from Pasni to Turbat in Kéch and thence to Isai in Panjgúr. A branch from it, taking off at Pídárk, joins the Turbat-Isai route via Bálgattar, at Rahgiwárán, to be mentioned presently.

North of Turbat this bridle path crosses the Garruk pass in the Kéch sand hills, and traversing Buléda proceeds by the east of Parom. Another fairly easy route to Isai from Turbat runs via Bálgattar, passing the Gorán-é-kandag and Dasht, i.e., Shahbánz Kalát.

Transport

Wheeled carriage is unknown and all transport is done by camel or donkey, the principal tribes engaged in the carrying trade being Sangurs, Jadgáls, Dashtis, Lattis and Kolwáis in Kéch and Kashánis and Barrs in Panjgur. The usual rates of hire for camels required by British officers on tour and for other miscellaneous requirements are 8 annas per day or per stage for a loading camel and 4 annas for a halt. Donkeys are not hired.

Steamers.

The steamers of the British India Steam Navigation Company call at Gwádar on alternate weeks. The steamer service to Pasni has been made weekly instead of fortnightly as an experiment since 1905. Country boats (known as Dangi and Batel) are used for coasting traffic and occasionally sail to Karachi and Bombay in India and to ports on the Arabian Coast and in the Persian Gulf.

Means of Communication.

Sub-post offices are open at Pasni, Gwádar and Panjgúr. Their functions include transmission of money orders, but not telegraphic money orders. Savings bank accounts are not kept.

Post offices.

A postal line between Pasni and Panjgur, at a cost of Rs. 3,300 debitable to Makran revenues, has been inaugurated as an experimental measure for one year since 1905.

Prior to 1903 the post for Makrán was received by the fortnightly steamer at Gwádar and despatched to Turbat by the Native Assistant by runners (kásid), but since 1903 the post is generally received via Pasni, where it is sent by kásid to Turbat and Isai. No arrangements exist for the receipt or delivery of letters outside these places, The wages paid to a kásid from Isai to Pasni or Gwádar amount to about Rs. 3-8-0 and from Turbat to Pasni or Gwádar about Rs. 1-8-0.

Telegraphs.

The only line of telegraph in the country up to 1905, was the overland line from Karáchi to Jásk, belonging to the Indo-European system, but the construction of a direct line from Karáchi to Panjgúr, which will eventually be linked with a branch of the Indo-European line extending through Central Persia, has recently been commenced (1905). The line will go to Las Béla via the Paboni pass and Uthal, and thence via the Jao Lak to Pirandarr, Wahli, Sar-i-Dap, Godirri, Sháhbánz-é-Kalát and Panjgúr. It is intended for the present to open offices only at Béla and Panjgúr. Those on the old line are at Pasni and Gwádar.

The Indo-European line.

The Indo-European Telegraph Department has charge of that portion of the system of telegraphs working between England and Karáchi, which belongs to the Government of India. It consists of two sections: the first, known as the Persian Gulf section, which runs from Karáchi to the head of the Persian Gulf, connects the Indian telegraphs with the second or Persian section at Bushire, and with the Turkish telegraphs at Fao. The Persian Gulf section consists of a sub-marine cable and a land line which runs from Karáchi to Jásk. Jásk is 693 miles west of Karáchi; of the land line connecting the two places, 15 miles are in British territory, 226 miles in Las Béla territory, 173 miles in

MEANS OF COMMUNICA- Makrán and the remainder in Persian Baluchistán. A cable from Maskat connects with the system at Jásk. The Persian section runs from Bushire through Shíráz and Ispahán to Teherán, thus connecting the Persian Gulf section with the lines of the Indo-European Telegraph Company. This section consists of a line, which runs overland and is worked under certain concessions allowed by the Persian Government, and which may hereafter become the property of that Government. Of the two Directors in the East, one has his head quarters at Karáchi and the other at Teherán.

Historical

The scheme for an Indo-European telegraph line appears to have owed its inception to the Reverend Mr. Badger, who in 1860 submitted a plan for establishing a line of telegraph overland from Basra to Karáchi via Bandar Abbás and the Makrán coast.

Reports on the scheme from the local officials proved highly favourable to its adoption, but certain political obstacles presented themselves owing to the undefined tenures and uncertain rights along the coast. From Bandar Abbás to Karáchi, the Sháh of Persia, the Sultán of Maskat and the Khán of Kalát, all had territorial claims, but their nature was not clearly known.

It was decided, therefore, to survey the Makran coast, and the Government of Bombay selected Major Goldsmid, then Assistant Commissioner in Sind, for the work. Major Goldsmid left Karáchi in December 1861, journeyed to Gwadar, and returned to Karachi at the beginning of February 1862. He entered into an agreement with the Iám of Las Béla, that the British Government would pay an annual sum of Rs. 10,000 for the protection of the line and the maintenance of line-guards, and made a preliminary arrangement with Mir Fakir Muhammad, the Khán of Kalát's náib, for the protection of the line between Kalmat and Gwadar in consideration of an amount to be afterwards specified.* The result of Major Goldsmid's enquiries was to place the Government in possession of full information. not only as to the local rights of the various chiefs along the coast, but also as to the encroachments which Persia had recently been making towards Kéch and Makrán.

Aitchison's Treaties, Vol. IX, third edition. CLXXXII and CLXXXIII.

was decided, therefore, to construct the line as far as MEANS OF Gwadar, and meanwhile to take up the question of the demar- COMMUNICAcation of the Perso-Baloch border.

TION.

Subsidies:

In 1863, a convention was made with the Khan of Kalat, in continuation of the preliminary arrangement made with Mír Fakir Muhammad, fixing the amount of the payment to be made for the protection of the line and those employed upon it at Rs. 5.000 per annum, which was to be expended upon the chiefs and people through whose country the line passed. Those selected were the náib of Kéch and the Gichki Chief of Kéch.*

When the telegraph station was opened at Ormára in 1862, Mír Mando, Omrári Bízanjau of Chambur in Kolwa, was the lám's náib of the place and was paid Rs. 40 per mensem as his share of the latter's subsidy. This continued till the removal of Jám Mír Khán from Béla in 1860, and in 1874 the payment was restored by the Commissioner in Sind owing to Mír Mando's valuable assistance. since been continued with one interval from 1879 to 1881, and on Mír Mando's death in 1883 was transferred to his son Mír Yár Muhammad.

About 1862, the payment of Rs. 1,000 to the Chief of Pasni was also authorized, and an agreement in connection with this payment was entered into with Mír Mahmúd of Pasni in 1800.

In 1869, when the extension of the line from Gwadar westward was carried out, a supplementary agreement was concluded with Mir Fakir Muhammad Bizanjau, and Mir Báhi Khán, the Gichki Chief of Kéch, for the payment of a further sum of Rs. 1,500.†

From 1869 it was found advisable for the line-guards to be paid direct by the Telegraph Department, and Rs. 1,900 were therefore deducted from the total sum of Rs. 6,500 payable to the ndib of Kéch and the Gichki Chief and paid direct to one Jemadár (Rs. 300) and to 7 line-guards (Rs. 1,685), the remainder, viz., Rs 4,520 being divided equally between the náib and the chief. A sum of Rs. 480 for the payment of two line-guards was also deducted from the pay of the Pasni Chief. In consequence of the outbreak

^{*} Aitchison's Treaties, Vol. IX, third edition

[†] Aitchison's Treaties, CLXXXIV.

MEANS OF COMMUNICA-

of 1898, a re-arrangement of the subsidies became necessary, and in 1904 they were as follows:—

Recipients.	Amount actually paid to the Chiefs	Amount paid direct to line-guards.
	Rs.	
Mír Mehráb Khán, Gichki	2,260	ı Jemadár at
MírAbdul Karím, Gichki	1,130	Rs. 25 Rs. 300 7 Line-guards at Rs. 20 Rs. 1,680
Mír Sheh Kásim, Gichki	1,130	at RS. 20 RS. 1,000
Mír Mahmúd, Kalmati of Pasni	520	2 Line-guards at Rs. 20 Rs. 480
Mír Yár Muhammad, Omrári Bízanjau	480	at Ks. 20 Ks. 480

The payment of the subsidies was made by the Assistant Political Officer at Gwádar from 1863 to 1879, when the duty devolved on the Director, Persian Gulf Telegraphs, and with the exception of the period from 1891 to 1898, during which they were paid by the Political Agent, Kalát, they have since been distributed by that officer.

Construction. The construction of the line began in June 1862, and it was completed to Gwadar by April, 1863. Construction was recommenced from Gwadar in March 1869, and the line was completed to Chahbar in April of the same year.

For some time after construction, matters went smoothly, but between 1875 to 1884, considerable difficulties were experienced owing to disturbances amongst the Rinds of Makrán. These came to an end after the late Sir Robert Sandeman's visit to Makrán in January, 1884. Later, during the rising of 1898, a portion of the telegraph line between Pasni and Gwádar was destroyed. No less than 370 posts had to be renewed, and nearly 11 miles of wire and a number of insulators were damaged.

Maintenance of the line and modifications of alignment. For purposes of supervision, the line has been divided into two sub-divisions, each of which is in charge of a gazetted officer. The Gwádar sub-division, which extends from Karáchi to Gwádar, has its head quarters at Karáchi, and the Jásk sub-division, from Gwádar to Jásk, has its head quarters at Jásk.

From time to time it has been found necessary to alter the original alignment of the telegraph line to more favourable ground. In Makrán, the Rumbar-Shádi Kaur diversion of 22 miles between the 66th and 88th mile from Ormára, and the Shádi Kaur-Kappar diversion of 48 miles from the 88th to the 136th mile west of Ormára are the most important.

The telegraph offices which had been originally opened at Pasni and Sonmiani, were closed in 1871 and that at Gwadar, in September 1893. The latter was, however, reopened as a combined post and telegraph office in October 1894.

A similar office was opened at Pasni in November 1903. The two remaining intermediate offices manned by officers of the Indo-European Telegraph Department between Karáchi and Jásk are now, therefore, Ormára and Cháhbár (1904).

Fifty-one linemen and line-guards are employed for the protection and maintenance of the line between Karáchi and the Perso-Baloch boundary, of whom six are stationed in British territory, twenty-seven in Las Béla, and eighteen in Makrán. The following are the places in Makrán at which they are posted. These establishments are all Government servants.

Means of Communication.

Opening and closing of offices.

Line establishment.

Stations a	t whi	ch line	-guard	s are	posted	Distance in miles from Karáchi,
Makola .			•••	•••	•••	 252
Rumbar .	•••	•••	•••			 273½
Pasni .	••		•.		•••	 283
Chakkuli .	••	•• •		•••	••• .	 318
Kandasol .	••	•••		•••		 326
Sarchib, Ka	ppar	•••		•••		 344
Shanikkánid	larr	•••			•••	 362 \frac{1}{2}
Gwádar .	••	•••		•••		 373
Ankárau .	•••	•••		•••		 386
Dasht River		•••	•••	•••		 414

FAMINE.

Tradition speaks of constant scarcity in the country and reference has already been made, in the section on History, to the traditions prevailing about suicide being resorted to by the people owing to the constantly recurring famines.

On one of the ancient tombs at Gwadar is an interesting inscription, a translation of which runs as follows: "When we came to this country, famine was at its height, a maund of wheat was selling for one sarr, and 8 big humbs of Basra dates at the same price. Yet we were such a hardworking and persevering people that we did not divorce our wives. We leave this as a memorial to guide our descendants." One of the neighbouring tombs bears the date 1468 A.D.

It may be said that hitherto scarcity has nearly always been chronic in Makrán, and the concomitant distress has only been alleviated owing to the scantiness of the population and by the abundance of dates which form the staple food of a very large part of the population. Inured to distress from their childhood, the people can eke out an existence in bad years with the products of the hills such as maghér, putronk, sundam, makánkúr, shingar, kalér and kunar.

These are consumed with avidity. Migration, too, offers a safety valve to those of the inhabitants who do not hold irrigated lands. If the limited demand for grain cannot be met within the country, imports by sea or from the Sarawán, and Jhalawán countries, Las Béla or even Seistán are obtained without difficulty.

No instances have been ascertained in which famine was sufficiently acute to cause mortality among the inhabitants. Local accounts speak of a famine in the sixties, when distress was widespread, and wheat and dates sold at 5 or 6 seers per rupee and juári at 9 seers. There was a total failure of the rice crop, and the distress was accentuated by the drying up of some of the important káréses. Successive droughts eventually "tell" on the quantity of water in the káréses, and when this occurs and the date crop also fails, severe scarcity may be expected. No protective measures appear to have ever been adopted in the past.

CHAPTER III.

ADMINISTRATIVE.

LITTLE is known of the form of Government in Makran previous to the rise of the Gichkis. The country appears to have always been sub-divided into a number of tracts and dependencies, each immediately governed by hereditary petty chiefs, but composing a small federation united Government; under one supreme authority, the ruler of the province of Kech, who received homage and possibly tribute from the rest, and to whom all quarrels amongst members of the confederacy were referred.

ADMINISTRA-

historical.

In the early part of the eighteenth century, the Gichkis gained supreme power in Makrán, but their supremacy was of short duration, as Nasír Khán I, of Kalát, (1750-51 to 1793-4) overran the country, and concluded an agreement with the Gichkis, the terms being that the latter were not to be disturbed in their actual possessions, but were suffered to enjoy them on condition that half the revenues of the districts they held were to be paid over to the agent or Náib of the Khán, appointed to reside at Kéch. Mand and the Rind country and Zámurán have always been quasi-independent.

For a complete comprehension of subsequent events, the fact that Nasir Khán I did not take over the complete administration of the country, but merely arranged to receive half the revenues, is one of great importance. When the Ahmadzais of Kalat appear on the scene, there appear to have been two principal Sardárs through whom the country was administered-the Sardár of Kéch and the Sardár of Panjgur. But towards the end of the reign of Nasír Khán I. Mír Báián I, sometimes called Bhái Khán, the Sardár of Kéch, appears to have quarrelled with his uncle Shéh

ADMINISTRA-TION AND STAFF.

Muhammad, and on the matter being brought to Nasír Khán's notice, the locality of Tump was given to the latter. A sanad, detailing the compromise effected, is still extant, and is dated 1206 H. (1791 A.D.). The distribution of the country between the three Gichki Sardárs dates from this time, the influence of the Panjgúr Sardár being predominant in Panjgúr and the valley of the Gwárgo, including Gichk and Parom, the Kéch Sardár holding roughly Buléda, the Kéch valley, except Tump and Mand, Dasht, Kulánch and Pasni, and the limits of the Tump Sardár extending approximately to Tump, Mand, Nigwar and Jíwnri, though, as a matter of fact, he never appears to have exercised any real authority in Mand.

The Khans of Kalát, on their part, divided the country for administrative purposes into two districts—the Kéch and the Panjgúr *niábats*. Tump was included in the jurisdiction of the *Náib* of Kéch. Kolwa was not administered from Makrán until a later date.

On the death of Nasír Khán I, the country soon fell into a state of anarchy and bloodshed, and the Gichkis took advantage of the troubles at Kalát to revolt and shake off the Kalát voke. Mehráb Khán (1816-17 to 1839) appears to have departed from the system introduced by Nasír Khán I, by appointing a man of position, Mír Fakír Muhammad, Bízanjau, to look after his interests as Náib of Kéch: and it must be attributed to his tact and energy, as well as to the matrimonial alliances which he formed with the Gichki family, that Makrán was reduced to obedience. Mir Fakir Muhammad appears, indeed, to have acquired almost undivided power in the province, but Abdun Nabi, who visited Kéch and Panigur in 1838, noted that he had always to consult and act in concert with Shéh Kásim and Mír Durra, Gichkis. In Panigur the Khán's deputy-governor at this time did nothing beyond collecting the Khán's share of the revenue.

Thirty years later, Ross, writing in 1868, thus describes the state of affairs: "The Kéj (Kéch) division is at the present day under the general supervision of Fakir Muhammad, the Khán's Náib, and Panjgoor (Panjgúr) under that of Meer Esan (Isa), a Gichkee chief. These chiefs, however, interfere but little with the administration of justice, etc.,

in the various subordinate districts where the local chiefs ADMINISTRAexercise unlimited power within their respective limits. Laws, as we understand them, there are none, and order is only enforced by the most primitive and summary means, and there is but little formal protection for life and property. The system of blood feuds has for ages been in force, and, for want of a more regular appeal to justice, exercises a wholesome influence. But, though by its means premeditated bloodshed is no doubt checked at its source, the blood feud is too remote in its retaliatory inflictions to check those crimes born of sudden passion; and the blood feud, once proclaimed, leads frequently to more crime than the fear of it has power to redress."

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MacGregor who visited Panigur in 1877 gives vivid picture of the situation and the way in which the Khan's representative was selected: "*There is a gentleman." he writes. "who is termed the Khán's Náib; but he is not the governor, and does not pretend to govern the country, or even to collect its revenue. He is, in fact, only the receiver of such revenue as the actual governor may have agreed to pay the Khan. The old agreement made between the Gichkis, the dominant family here, and Nasír Khán was, that the former were to be undisturbed in their possessions in every way, on condition of their paying over one-half of the revenues of the district to the Khan; and this arrangement still holds good. Consequently, the government of Panjgur has always been allowed to remain in the hands of the Gichkis, the actual individual exercising the functions of governor being either he who was strongest or he who agreed to pay most."

The system of dual control, thus initiated, would probably have continued to be moderately successful, had not matters been complicated by the Naushérwáni element, which had acquired a firm footing in Panjgur in virtue of its possession of certain lands and of the rights to the collection of revenue which had been obtained either from the former Gichki Sardárs, or by marriage with Gichki women, or from the Khán. On the accession of Mír Khudádád Khán to the throne, events occurred which gave rise to bitter hostilities

[·] Sir C. MacGregor, Wandering's in Baluchistan, p. 101.

Administration and Staff.

between the Khán and Sardár Azád Khán of Khárán, with the result that the latter's jágirs in Panjgúr were confiscated. The open breach continued, and not long after Sir Robert Sandeman's appointment as Agent to the Governor-General. Azád Khán sent a raiding party against Panjgúr. British officers had been posted to Gwadar since the opening of the Indo-European telegraph line in 1863, and been charged with the control of political affairs on the coast; but, in 1879, the appointment of the Political Assistant at Gwadar was abolished, when the payment of the telegraph subsidies, and the control of the coast generally, devolved on the Director, Persian Gulf Telegraphs, with a native assistant in charge at Gwadar-an arrangement which still continues. But the conclusion of the treaty* with Kalat in December 1876 had, meanwhile, placed the relations of the British Government with Kalát and its dependencies on an entirely new footing. On learning that Azad Khan had raided Panigur in concert with Mir Isa Khan Gichki, who had been ousted from the post of Naib of that place by the Khan, in favour of Mir Gajian, Mir Khudadad made up his mind to proceed in person to Panigur with a force sufficient to repel Azád Khán; but his attention was invited to article 5 of the treaty, and it was arranged that Sir Robert Sandeman should settle the matter. Sir Robert was not able to proceed to Makrán at once, and, in November 1882, another raid into Panigur was perpetrated by Nauroz Khan, (the present chief), son of Azád Khán of Khárán, in which the Gichki Sardár of Panigúr, Mír Gájián, who was also the Khán's Naib, was killed, and Panigur for the time fell into the hands of the Kharan Sardar Meanwhile, the Khan had despatched his eldest son, Mír Mahmúd Khán (the present Khán, 1905), with a force to Panigur, whose presence prevented Nauroz Khán from taking any further effective action. despatch of such troops was considered an infringement of the treaty of 1876, and Mir Mahmud was recalled; but he first entered into an agreement with Mir Baian, the Gichki Sardár, about the revenues of Kéch. The agreement was executed on Rajab 14, 1300 A.H. (May 12,1883, A.D.), and may be quoted here in extenso as it is very suggestive.

[•] Note.-No. CLXXVIII, Aitchison's Treaties, p. 396 et. seq.

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- "One-half of the tithes and other revenues in kind that ADMINISTRAmay be collected, in accordance with the ancient custom of the country, at Kéch or in its dependencies should go to His Highness the Khan and the other half to Sardar Mir Báhi Khán (Báián); and the whole of the revenue which may be realized through the aid of troops will belong to the Khán, and the Sardár will have no claim on it. Of the revenue which has already been realized by me from Surgi (Soragi) to Kalátak (Kalátuk), one-half has been credited to the Kalát government and the other half given to Sardár Báhi Khán (Báián). This division will hold good for the future.
- "The produce of the lands, which have heretofore remained in the possession of Fakir Muhammad, deceased, will now be credited to Government, and one-tenth of the produce of those lands lately possessed by Fakir Muhammad and Sardar Bahi Khan (Baian) will be retained by them for ever.
- "The revenues, etc., realized from the Kushtang (Gushtang) fort will belong to Government, and those collected without the aid of troops will be divided equally, i.e., onehalf will go to the Kalát government, and the other half will be taken by Mír Báhi Khán. Should His Highness the Khán at any time desire to give up the fort in inám or sell it, he will first consult Sardár Báhi Khán and not give it to any one except the above Sardár or Mír Abdul Karim. The water and lands belonging to the Kalát government and now in the hands of other people will be resumed and attached to the Kalát State.
- "The revenue from any lands which may be hereafter brought under cultivation will be divided equally, viz., half will go to the Kalát government and the other half to Sardár Báhi Khán.
- "The appointment of Naib will rest with the Kalat government. The Náib thus appointed will receive orders to assess the taxes in consultation with the Sardár; and the balance of the taxes collected in Kéch and its dependencies will, after deducting the wages of the servants and protectors of the roads, be divided equally between the Khán. and the Sardár.
 - "The annual allowance of Rs. 5,000 for the protection of

Administration and Staff. the telegraph line, hitherto paid by the British Government to Sardár Báhi Khán, will remain untouched.

"These few lines have been drawn up as a record in case of necessity."

The absence in this document of any reference to the system on which the administration was to be carried on and, on the other hand, the detail with which revenue questions are dealt with are matters which are specially worthy of remark.

This was followed by Sir Robert Sandeman's mission to Makrán in 1883-4, in the course of which the Naushérwáni dispute was settled, and Mir Gájián's brother, Muhammad Ali, appointed Náib of Panigur; but, owing to the absence of any controlling authority on the spot, its effects were only temporary. In Kéch, after the death of Fakir Muhammad Bizanjau, the Khan had nominated Mir Shahdad Gichki as Náib of Kéch, and Sir Robert Sandeman found him thus installed during his first mission in 1883-4. Shahdad was a sworn enemy of the Kéch Sardar Mír Báián, whom he opposed in all matters, further complications being the result. Captain T. Hope, Political Agent in Kalát, visited Panigúr in 1885, and found that the previous year's arrangements were working satisfactorily; but immediately afterwards the country appears to have fallen into a state of great disorder, and was not again visited by a British political officer till the beginning of 1880, when some of the disputes were enquired into, and settled by Mr. I. Crawford, I.C.S. Effective measures, however, could not be taken to mend matters between the local chiefs. The Khán's share of the revenue had also fallen into arrears for about five years. At this juncture the Khan of Kalat invited a discussion of Makrán affairs, which took place at Quetta on November 25, 1889, and resulted in a decision to remove Shahdad and appoint a new Naib in consultation with Sardar Mir Baian. The Naib was to assist Sardar Báián in collecting the revenue and administering the country. but he was not to interfere in any way with the Gichkis. In the following month Colonel Reynolds, Political Agent, South-Eastern Baluchistán, proceeded to Makrán to put a new system in train; he supervised the realization of the revenue as far as was possible, and enquired into various

disputes. The recommendations which he made as to future administration led to Sir Robert Sandeman's second tour to Makrán, which was undertaken in 1890-91. He found everything involved in chaos, and concluded that the intervention of a British officer was necessary in Makrán for the maintenance of peace and the raising of the revenue. With this object he left behind Mr. G. P. Tate, of the Survey of India Department, and Major Muir to look after the management of the country. Immediately afterwards Mír Shahdád, who had been removed from his appointment as $\Lambda'dib$ early in 1891 in accordance with the decision of November 1889, made a murderous attack on Major Muir, when he was seriously wounded.

ADMINISTRA-TION AND STAFF.

Mr. Tate was now appointed to hold charge of the country on behalf of the Kalát State to administer the revenues, as well as generally to carry on political duties connected with that administration. He was assisted by a native assistant, Lála Udho Dáss, in revenue matters, who was placed in charge of the Kéch niábat. The limits of the administration were defined to be the Kéch and Panjgúr niábats, including the districts of Jau, Mashkai and Kolwa. The headquarter station of the administration was Panjgúr, but the native assistant was stationed at Turbat in Kéch. A small military force was retained for Mr. Tate's protection. The arrangement proved highly beneficial to the interests of the country; a large increase was effected in the revenue and peace was restored, and crime decreased.

Mr. Tate was withdrawn from Makrán in 1891. Captain McDonald was deputed to Panjgúr at the end of that year, and remained there until 1893.

In the following winter, Captain Ramsay visited Makrán. During 1894 proposals were under the Khán of Kalát's consideration for pacifying the country and establishing his influence, but as he was unable to raise a body of disciplined troops, he, therefore, applied for the services of a European officer to raise a new body of troops, and to improve the discipline and efficiency of the existing army. Lieutenant Le Mesurier was accordingly appointed Military Adviser to the Khán, and the Kalát State troops, which were disbanded in 1899, were raised and organised. Whilst the troops were being raised, however, disputes between the Rinds of

Administration and Staff.

Mand in Makran became very serious and Captain Kemball, Political Agent, South-Eastern Baluchistán,* was ordered, in the commencement of 1895, to proceed to Makrán to settle He was accompanied by a strong military escort of 300 infantry, 6 cavalry and 2 guns. On his return he suggested the advisability of transferring the political control of Makran affairs from the Political Agent in Southern Baluchistán, by whom they had been directed since 1885, to the Political Agent, Kalát. This proposal was sanctioned. The Khán of Kalát proceeded to Makrán in November 1895 to consider the reform of the administration. The services of Lála Udho Dáss were placed at His Highness's disposal as násim, and one kárdár in Panjgúr and another in Kolwa were appointed to work under his orders and to remain in charge of the local revenue accounts, acting in concert with the Khán's Náibs, by whom the actual revenue collections were to be made. Detachments of the Khán's newly organized troops were also stationed at various places. deputation of the násim commenced from April 1, 1896.

Things proceeded satisfactorily at first, but a rising took place on the 6th of January 1898, led by Mehrab Khan Gichki and Baloch Khan Nausherwani, which resulted in the imprisonment of the násim. The result was the fight at Gokprosh on the 31st of January, when the insurgent Sardárs were severely defeated by a force under Colonel Mayne. On the withdrawal of the regular troops, garrisons of Kalát State troops were left in Buléda, Tump and Panigúr.

Modern developments, and relations of násim with the Political Agent. In the spring of 1899, Mir Mehrulla Khan Raisani was appointed nasim of Makran under the general supervision of the Political Agent in Kalat, with instructions to govern the country by means of levies and with the help of the people of the country. The new Kalat State troops were withdrawn and disbanded. The recalcitrant Sardars and rebels at the same time made their submission. Mir Mehrulla Khan continues (1906) to hold the post of nasim. An Assistant Political Agent who is ex-officio Commandant of the Makran Levy Corps, which was enlisted in 1904, has been posted at Panjgur since that year.

[•] From 1885-86 to November 1895, Las Béla and Makrán were constituted into one Political Agency, known as South-Eastern Baluchistan, with head quarters at Karachi.

Makrán, in respect of political control, is a portion of the ADMINISTRA-Kalát Agency. On the Makrán coast the Director Persian Gulf Telegraphs acts as an assistant to the Political Agent. He is also a justice of the peace within the limits of the Kalát State, the Chief Court of the Punjab being the court to which European British subjects are liable to be committed for trial. He disburses the telegraph subsidies to the chiefs and headmen for the protection of the Indo-European telegraph line, but he cannot withhold any payment without reference to the Political Agent, Kalát.

TION AND STAFF.

> Powers of Director. Persian Gulf Telegraphs.

Existing local staff.

For purposes of internal administration, Makrán is divided into five niábats, namely, Panigúr, Turbat Tump, Kolwa and Pasni. The názim is responsible for the general administration of the country, as well as for the collection of the Khán's share of the revenue. His head quarters in winter are at Turbat and in summer at Isái.

In 1903, the administrative staff working under the názim. excluding levies which numbered 79 horse and 81 foot, was as follows :-

Locality.		Náibs and Sub-Náibs.	Munshis.	Menials.	Total
Panigur		ı	4	4	9
Turbat (Kéch)	•••	•••	3	4	7
Tunp	•••	r	I I	I	3
Kolwa 🔐	•••	1	I	•••	2
Pasni	•••	I	1	4	6
Kaush-Kalát	•••	•••	I	1	2
Násirábád	***	•••	1		I
Kalátuk	•-	***	1	L	2
Dasht	•••	•••	1	•••	I
Kulánch	•••		r		I
Total		4	15	15	34

All persons, including holders of revenue-free grants, are bound to assist the nasim with armed men when occasion requires. Allowances are also granted to certain leading men for assisting the názim generally, accompanying him on tour, maintaining the peace, and supplying men-at-arms. if occasion requires. A list of them will be found in appendix IX. Certain payments to headmen are also made by the British Government for the protection of the Indo-European telegraph line, and are detailed in the article on

JUDICIAL. . Means of Communication. For revenue work, the Naibs are assisted by village headmen.

Civil and Criminal justice and crime.

Justice is administered in civil and criminal cases either by recourse to shariat or to jirgas. As has been explained in the section on Population, the people have great regard for the provisions of the Muhammadan Law, and civil cases of importance about questions of land, inheritance, etc., are almost invariably referred to one or other of the gázis who are recognised by the local administration, and are stationed at Kéch, Tump and Panigur The Náibs, with the help of local men of position, form jirgas for the disposal of other cases, and in petty cases their decision is considered final; but more important cases are submitted to the násim with the *irra*'s recommendation. Other serious cases are decided by the násim with the help of a jirga of Sardárs, and the decisions are submitted to the Political Agent, Kalát, for confirmation. Cases decided by shariat also require confirmation either by the násim or the Political Agent, Kalát. Cases occurring in areas which are not subject to revenue are generally dealt with by the headmen, but the násim's intervention is sometimes sought.

The country is extraordinarily free from serious crime. The majority of cases are connected with land or cattle lifting and assault. Murder is uncommon.

The majority of the civil cases relate to land disputes, inheritance, or debt, etc. During 1900-01 the number of cases decided was :--

Criminal	•••	• • •	• • •	•••	•••	63
Civil	•••	•••	•••	•••	•••	31
Revenue a	and mis	scellan	eous	•••		49

Settlement of border cases.

Since 1902, a border meeting has been held, attended by the násim of Makrán with the Political Agent or Assistant on the one side and by the Persian Governor of Kirmán or Deputy Governor of Bampur on the other with the object of settling claims made by subjects of the one government against the other. The first of these meetings was held at Kirman in 1902. In 1905 and 1906 they have been held at Charbar on the Persian littoral.

FINANCE.

No record exists of the income derived from Makrán, as it is now constituted, previous to the period when its connec-

FINANCE.

tion with Kalát began in the reign of Mír Nasír Khán I (1750-51 to 1793-94). A vernacular history * is extant which states that in that ruler's time the Khan's share of half the revenues of the country amounted to 95,000 tila annually. Reckoning a tila † at Rs. 5, the total revenue obtained by Nasír Khán I would have been equivalent to Rs. 4,75,000 in current coin; but it must be remembered that Nasír Khán's power extended westward over a large part of what is now Persian Makrán, and that Gwádar and, possibly, Ormára are said to have been included in Makrán about this period. But, as has already been explained, the Khans were always dependent on the caprices of the Gichki Sardárs for the amount of revenue they received as their mojety, owing to the anomalous system of administration, and it is not, therefore, surprising to find Pottinger mentioning at the beginning of the next century that the revenues of Kéch were very trifling, whilst those of Panigur amounted to less than Rs. 20.000 per annum. Háii Abdun Nabi, who visited the country in 1838, towards the close of the reign of Mír Mehráb Khán II (1816-17 to 1839), estimated the revenues of Kéch at 12,000 Muhammadis, 4,000 maunds of grain, and 4,000 packages of dates, and those of Panigur at 2,000 Kásháni i rupees, 500 Company's maunds of grain received as the tithe of the summer crop, and two-thirds of the same quantity received for the autumn crop. The tithe on dates was said to have realized 6,500 Company's maunds. Thus, the chief source of revenue appears to have been that from land, while in Panigur and Kolwa a small amount was derived from octroi.

Masson, writing about 1840, only mentions the levy of dah-yak, but does not state the total amount derived from it. In 1868, Ross mentions that the balance of the Khán's moiety of the revenue of Kéch, after the payment of expenses, seldom exceeded Rs. 10,000 annually, and that

[•] History of Kalát, compiled by K. B. Qázi Jaláluddin, C.I.E., Political Adviser to His Highness the Khan of Kalát.

[†] The present exchange value of a tila in Makrán is Rs. 7-8-0 in British Indian currency, but it is stated to have been only equivalent to Rs. 5 in former times.

[†] The exchange value of a Muhammadi rupee is now 4 annas and that of a Kásháni rupee 12 annas.

FINANCE. from Panjgúr the Khán was believed to receive about Rs. 20,000 per annum.

The state of anarchy, into which the country had fallen in Mir Khudádád Khán's time, prevented any systematic realizations, nor does Sir Robert Sandeman's first mission to Makrán in 1884, though it resulted in the restoration of peace, appear to have effected any improvement in revenue matters. In a report submitted in April 1880, Mr. I. A. Crawford mentioned that the Khan got no revenue at all from Panigur, while the total which he derived from Kéch was only Rs. 5,600. In the following year, Colonel Reynolds, Political Agent, South-Eastern Baluchistán, reported that the Khan's share of the land revenue, including both the cash assessments and the tithe of the Kech district, according to the Náib's statement, did not exceed from Rs. 6.000 to Rs. 7,000, and that the total revenue of Panigur was estimated at about Rs. 16,000 a year, of which the Khan's share was Rs. 8.000. The total share of the Khan from both districts thus amounted to about Rs. 15,000.

A new era began with Mr. G. P. Tate's deputation to Makran in 1891, and henceforth more reliable data are available for dealing with the subject of Finance. Mr. Tate found that the sources of revenue forming the Khan's moiety consisted of half of—

- (i) the general land revenue, comprising the cash assessment known as sarr-é-sháh, and a tithe on all cultivated produce, including dates, called dah-yak;
- (ii) fines levied by jirgas;
- (iii) octroi;
- (iv) fishing and port dues;
- (v) baital or assessments on lands, the ownership of which had lapsed to Government and the whole of—
 - (a) any revenue for the realization of which the armed intervention of the Kalát government was necessary;
 - (b) the proceeds of crown lands.

The revenue from all sources for the year 1891-2 amounted to Rs. 35,840, the percentage of land revenue being about 80 per cent. No actual figures were available for 1892-3,

but the budget estimates were calculated at Rs. 39,343. In the succeeding three years—1893-94 to 1895-96—the country reverted to its former state of disorder, and no figures are available. In 1896, Lála Udho Dáss was appointed názim in Makrán, and during his administration the revenue from all sources was as follows:—

FINANCE.

Year.						R	levenue.
1896-7	•••	•••		***	•••		Rs. 56,858
1897-8	***		•••	• • • •	***	•••	39,753

The large revenue of 1896-7 was due to the recovery of previous arrears. Another hiatus was caused by the events of 1898; but since the administration of Mir Mehrulla Khán, Raisáni, the present názim, the figures of revenue have been:—

Year.						Revenue.	
							Rs
1899-1900	•••	•••		•••	***	•••	28,814
1900-01	***	***	***	•••	•••		39,771
1901-2	•••	•••	***	•••	***	•••	38,043
1902-3	•••	•••	•••		***	***	45,529
1003-1				***		***	38.03I

At present (1906) the nisámat revenue is mainly land revenue which includes a small tree tax on the numerous date palms in the Kéch, Panjgúr and other valleys; grazing tax; cattle pound receipts; harbour dues; salt; and unclaimed property. The nisámat receipts for 1905-6 were estimated at Rs. 60,000, excluding the Gichki Sardárs' share which is collected for them by the násim. The revenues have, in recent years, been found insufficient to meet the ordinary expense of administration, and the deficit is made good by a subvention from the Khán's funds. The revenue appears to be collected without difficulty or friction.

The expenditure of the administration in 1902-3 amounted Expenditure. to Rs. 72,857. In 1903-4, the principal items were as follows:—

s :				Ks.
Pay and allowances of nazi	m	***	•••	6,600
Pay of levies	•••	•••	•••	35,640
Pay of establishment	•••	•••		6,360
Allowances to motabars	•••	•••	•••	5,780
Pay of Náibs	•••	•••	•••	3,120
Medical establishment	•••	•••	***	1,200
Pay of 30 extra levies	***	•••	•••	4,320
Contingencies	•••	•••	***	3,690
Miscellaneous	***	***	•••	3,500
Roza	•••	•••	***	2,400

Total Rs. 72,610

FINANCE.

Besides the expenditure incurred by the Kalát State, the cost of the Makrán Levy Corps, including the pay of the Assistant Political Agent and of the telegraph subsidy, is borne by the British Government. The former amounts to about Rs. 1,19,000 and the latter to Rs. 5,520 per annum. The distribution of the telegraph subsidy will be found in the section on Means of Communication.

The expenditure for 1905-6 was estimated at Rs. 88,000. This item included the cost of the názim and his establishment and levies, allowances made to local Sardárs and motabars and the public works and postal expenditure amounting to Rs. 14,000. The levies have been reduced since the establishment of the Makrán Levy Corps, but still cost about Rs. 29,500 yearly. The postal expenditure has so far been made through the Assistant Political Agent in Makrán who maintains the road, a camel track from Panjgúr to Pasni, and the present postal service.

LAND REVENUE. Early revenue system.

Practically no information exists as to the early revenue history of the country. That men-at-arms were taken from it, is known from the existence of a sanad from Nádir Sháh in possession of the Kharan chief, dated 1740, authorising one of the latter's ancestors to collect a levy of 150 men from Kech, Tump and its dependencies. seems to be no doubt that, besides this, a system of taking cash and produce revenue existed from the earliest times; and, so far as can be ascertained, the two principal items were dah-yak, or one-tenth of the produce, and sar-é-sarr, a poll tax at 4 annas per head. Military service (lánk-bandi) also had to be performed by all persons whether revenue-paying or revenue-free, but, in the time of the Kháns of Kalát at any rate, no specified number of men had to be found as was the case in the Sarawan and Ihalawan countries. Dah-yak, sar-é-sarr and lank-bandi still constitute the only exactions made in the exclusive possessions of the Gichkis of Panigur and Kéch and in the Bizanjau estate of Pidárk. Subsequently, and probably after the country had fallen under the Bráhuis, the sar-é-sarr assessment appears to have been replaced by a cash assessment on villages, called sarr-e-shah, and Abdun Nabi records that the cash assessment on Panjgur in 1838 was 2,000 Kashani* rupees.

LAND REVENUE.

In the previous section, the system under which Nasír Khán I of Kalát arranged to take half the revenues of the country has been referred to, and, as might have been expected, when disputes with the Khan of Kalat broke out in the country, the system of dual collection was found unworkable. The Khán's representative, with his handful of Bráhuis, was far from his base, and was either unable to supervise the collection of the Khan's revenue or sought to turn his term of office to his own advantage. neither the will nor the power to introduce any improvements into the system. The Gichki chiefs had no hesitation in alienating the revenue to those who sided with them against the Náib, and the better class of Baloch in Kéch, such as Lundis, Kattawars and Hots, in this way obtained exemption from payment. The Gichkis, at the same time, did not suffer as they made up for the absence of a fixed revenue demand by occasional calls on the people for bijiár, which each Sardar would receive in cash or cattle, or by bindag, i.e., begging, when a camel load of grain, etc., would be given. Dasht, Nigwar and Kulanch thus practically escaped paying revenue altogether. The position is thus described by Ross, writing in 1868: "The Náib resident at Kéj (Kéch) is held responsible by the Khán for the collection of revenue. One-half of the revenues is allowed to the In Kéj (Kéch), Tump and Násirábád, where the Gichki chiefs reside, they themselves collect the revenues of their estates, and pay over the proper share to the Náib. the other districts, the revenue is collected by the headmen and made over to Fakir Muhammad, who pays the Gichki chief, Mír Báián (Mír Bái Khán), his allotted share. system observed of imposing the taxes is as bad as could be. The agriculturists bear the burden almost alone, and of these the poor only, the rich and powerful being usually exempted. One-tenth of the produce of the fields and groves is the property of the State, added to which is a tax on inheritances. These, with the exception of occasional fines, are the only sources from which the State derives revenue.

^{*} The exchange value of a Kashani rupee is now 12 annas.

LAND REVENUE. Trade and manufactures escape free. The land tax would no doubt produce a considerable income, were it not that whole classes have been exempted by grants from its infliction, and these the wealthiest of the people. In Kéch it is estimated that four-fifths of the land property is owned by Gichkis, Sangurs and others, claiming absolute immunity from all taxation. Under these circumstances, the amount of income actually realized is ridiculously small, compared to the produce of the country."

The Kháns, therefore, found themselves compelled to devise another means of filling their exchequer and hit on the plan of despatching periodical military expeditions to obtain their share. The collections thus made were called sursát, and they were realized from everyone except the Gichkis and some of the Baloch headmen who assisted the expedition. Then would follow a further period of anarchy until another raiding expedition could be organized and despatched by the Khán.

Gradual changes thus took place, and while the Gichkis and the Khan continued in most places to collect the revenue conjointly, the Khan, in course of time, came into possession of the exclusive revenue rights in certain places and the Gichkis in others. Thus Júsak and Malikábád in Kéch being considered equal, an exchange was effected between the Khan and the Gichkis, the former taking Iúsak and the latter Malikábád. Similarly, in one of the frequent rebellions that occurred, Muhammad Khán, Gichki, during the time when Mir Fakir Muhammad, Bizanjau, was Náib, obtained possession of Turbat fort, and, on its being re-captured by Fakir Muhammad, the whole of the rights to the revenue of Turbat as well as to those of the hamlet of Apsar were retained by the Khán. The Naushérwánis, Mírwáris and Sardár Khél Bízanjaus were at the same time making headway in the country and acquiring the right to the revenue, as well as the proprietary right in various These cases are cited as indicating the complicated circumstances under which the existing revenue system has grown up and the difficulty of describing it in detail.

Complications caused by the footing obtained by the Naushérwáni chief, Azád Khán, in Panjgúr occupied a large share of Sir Robert Sandeman's attention in his expedition of 1884, and, as a result of his enquiries, certain rights of Azád Khán were recognised in Khudábádán, Tasp and Sari-Kaurán.

LAND REVENUE.

Afterwards the system of revenue was reported on by British officers, including Mr. Crawford in 1889 and Colonel Reynolds in the following year, but it was left to Mr. Tate to place on record the fullest account of the revenue system as he found it. Previously no accounts had been kept, and no records had been in existence, and the information as to the various shares held by the different parties interested had to be sought from the gazirs or watchmen.

We are thus brought to the system of land revenue as Tenures. it now exists, but, before proceeding further, it will be convenient to explain the prevailing system of tenures.

The produce of the land is divided between three groupsthe revenue-taker, the proprietor, and the tenant where there is one. But, owing to the circumstances already explained. Makran differs from other areas, where the right to the collection of the land revenue is vested in a single unit, i.e., the State or the Khan, in that the revenue-taker is represented in most areas by the person of the Khán conjointly with the Chief of Panigur, of Kéch or of Tump, as the case may be. In others the Khán takes the revenue conjointly with some other member of the dominant classes, such as the Naushérwánis. These are the revenue-takers.

But both the Sardárs and the Khán also hold, either Proprietors. severally or jointly, separate estates in which they have acquired the proprietary right. In such cases they have become the proprietors, known as Mirásdár or Milk-é-wája. Next to them in importance as proprietors come those who acquired estates by the sword or by the gift of the rulers. Such are the Naushérwáni, Bízanjau and Mírwári Jágirdári and inám khor holdings, and a good many smaller estates which are in the possession of minor branches of the Gichki family. The former and two other forms of proprietorship consisting of petty revenue-free holdings known as barát-wár and muáb will be dealt with later under Revenuefree grants.

The great body of the proprietary class is, however, composed of the petty Baloch landowners, each possessing a small hereditary holding (arbábimulk) on which he lives.

Land Revenue. Dry-crop land is almost entirely cultivated by this class, and tenants are seldom employed.

TENANTS.

Coming now to tenants, it may be premised that tenants who are employed for the cultivation of irrigated lands never acquire an occupancy right. Tenants, however, who construct irrigation embankments in rain or flood crop lands acquire a heritable right of occupancy in such lands so long as the embankment remains standing. They also have a right to sub-let. Instances are known in which such tenants have sold their interest in the embankment or given it in dower. If an embankment is carried away, an option of renewal is generally given to a tenant who has made the original embankment on the condition of re-constructing it. Tenants who are given land to cultivate which has already been embanked are purely tenants-at-will, and are liable to ejectment at the next harvest.

Tenants in Kéch. In Kéch, tenants of irrigated lands are known as sangi or baddi. They are also known as nafars. They are hired labourers, paid with a share of the produce, rather than tenants, and the terms on which they are employed have been referred to in the section on Rents. Three sangis are employed on each hangám of a large kárés and two for each hangám of a small one. In other irrigated tracts, tenants are known as sharik, shari-bur or basgar, the latter term being used in Kolwa.

.Tenants in Panjgúr. In Panjgur, the land belonging to the dominant classes and the better class of Baloch is in the hands of Nakibs as tenants, but these Nakibs cannot acquire an occupancy right in irrigated land. In flood-crop land, a man making or restoring an embankment acquires a right to hold the land above it for three years at a specially low rate of rent, generally one-eighth. As in Kéch, the baddi or nafar is employed by large cultivators, but baddis do not work in parties as in Kéch, but individuals are engaged who are given their food and clothes and a small share of the produce.

Tenants of crown lands.

Crown lands are generally let on annual leases to contractors known as *dehkáns*, who are men of sufficient substance to employ *sangis* for the cultivation. The usual terms made with the contractors are that the produce of wheat and beans should be divided, after providing the *sangis*' remuneration; that a fixed amount per *hangám* of water should

be paid from the rice crop; that the surrat crop should belong exclusively to the dehkán; and that a fixed amount in cash should be paid for the dates.

LAND REVENUE.

During the winter, when plenty of water is available, an Miscellaneowner of dry-crop land situated close to a source of irrigation sometimes arranges to obtain water for irrigating it from this source. In return he either engages to supply labour for cleaning the kárés, generally at the rate of one man per tassu, or pays the owner one-third of the produce.

OUS tenancies.

Land bearing palms is, sometimes, given out for cultivation rent-free, in consideration of the benefits that will accrue to the date trees from the watering.

Throughout Makrán it is a well recognized custom that a tenant-at-will, or even a dehkán in crown land, who plants date trees, acquires a right to half the trees that survive. He has full powers of alienation over such trees. Darzádas of Kéch own many trees in this way which stand on land with which they have no longer any concern.

> Existing revenue system. Character of assessments.

The sources from which land revenue is at present realized are the same as those which existed in early times, but the method of collection has been modified in some cases. consist of a tithe of the produce known as dah-yak, a fixed cash assessment (zarr-é-sháh), a tax on dates, a tax on cattle and revenue derived from crown lands and escheats.

Dah-yak.

Dah-yak is an assessment in kind, at one-tenth of the produce realized on all lands, whether irrigated or dry-crop. In the case of Khán's subjects cultivating land in Kolwa, the proprietary right in which is vested in the Naushérwánis, Sardár Khél Bízanjaus, or Mírwáris, the tithe is taken from the ryot's share only, i.e., after deduction of the proprietor's share.

The fixed cash assessment of *zarr-é-sháh* appears to have Zarr-é-sháh been originally levied from irrigated lands only, but was afterwards fixed on localities, whether permanently irrigated or not. It is paid in addition to dah-yak. After the amount to be paid by a particular locality had been determined, the distribution among the owners of land was left to be fixed by the owners themselves. Influential landholders thus escaped altogether, and the whole burden was placed upon Subsequently, many of those from whom the tax was originally levied transferred their property, but they

LAND REVENUE and their descendants have remained responsible for the cash assessments. There are thus many persons who now have little or no land, yet still have to pay the sarr-é-sháh, while others have added to their holdings without any proportionate increase being made in the amount of sarr-é-sháh payable by them. Thus the tax has in some cases degenerated into a poll tax. The proceeds of the fixed assessment are shared between the revenue-takers in the same proportion as the produce revenue.

The assessment on Kéch is Rs. 9,574 and that on Panjgur Rs. 1,624; total Rs. 11,198. The amount of sarr-é-sháh originally assessed on Kéch, excluding Kolwa which is not subject to sarr-é-sháh, was Rs. 9,500; but, in course of time, changes have taken place by which a slight increase has been made in the assessment. The amount originally assessed on Panjgur was Rs. 2,000, but Rs. 376, the amount due from Khudábádán, are now excluded. The collections of sarr-é-sháh since 1891-2 have seldom exceeded Rs. 6,000. The highest amount ever realized was Rs. 7,274 in 1891-2.

Zarr-& nakhil• Zarr-é-nakhil is the cash assessment on dates. The assessment was originally a tithe of the produce, and was paid either in cash or kind as the owner preferred, but it was transformed into a cash assessment during Mr. Tate's administration. The rates of assessment were Rs. 6 and Rs. 4 per hundred for first and second class date trees, respectively, but, since 1903, the assessment on first class trees has been raised to Rs. 6-4 per hundred, i.e., I anna per tree.

Pas-gatta.

Cattle tax is known as pas-gatta, and is realized at the rate of one sheep in fifty per annum, and also 2 seers of ght. If the ghi is not forthcoming, Re. 1 in cash or an additional sheep is taken. The tax is levied by all the dominant classes who generally take a sheep at each harvest, and the extent of the jurisdiction of a particular chief or headman is determined by the tract of country in which he imposes gatta. Some of the tribes, such as Sangurs, Kolwais, Koraks and Kauhdáis, who are really the Khán's subjects, have to pay three sheep as cattle tax per annum, one to the Khán and one or two to the local headman. At the time of collection a representative of the Gichkis accompanies the party told off by the násim, and the sheep collected are divided as in the case of land revenue.

There is an old established custom in Makrán that, on the excavation of any new source of irrigation, such as a kárés or kaurjo, the revenue-takers have a right to a share in 2 hangams of the water and a proportionate amount of land. The proprietary right in such land and water vests in equal shares in the Khan and the Gichkis, in whose area the new source of supply is excavated. No part of the expense of excavation is borne by the revenue-taker, nor is he liable in any way for the cost of repairs. These hukumi hangams. as they are called, are to be found in almost all irrigation channels, unless they have been sold or alienated by the rulers themselves, and most of the crown lands, srahm, are derived from this source.

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Crown lands.

The revenue-takers, besides possessing a general right in all uncultivated waste, called wapát, i.e., dead lands, also claim a proprietary right in all rabjag, and abérag or shapát lands. Rabjag lands are those lands which have long been deserted, but in which there are signs of previous irrigation, while abérag and shapát (the latter term being used in Panigur and Kolwa) are similar lands where traces of former embankments still exist. The claim to proprietary right is not, however, always exercised, especially in the case of land newly brought under irrigation, but the lands are allowed to be cultivated on payment of the ordinary rate of revenue, viz., one-tenth, the right of proprietorship passing to the excavators of the new source of irrigation. As an instance of a higher rate, the dry-crop lands between Kalátuk and Churbuk may be mentioned in which the share of the revenue-takers is one-fifth, the rate usually levied by proprietors from tenants who have built embankments, and supplied the bullocks, seed and labour for cultivation.

Another class of crown lands are those known as baital or estates escheated on failures of heirs.

The principal places at which crown lands are situated are Turbat, Kaush-é-Kalát, Kalátuk and Násirábád. baital lands have in course of time been amalgamated with crown lands, and are not now separately identifiable.

The procedure usually adopted for the collection and division of the revenue is as follows*:-When each harvest is and division.

Method of collection

^{*} This procedure was followed in 1903.

LAND REVENUE.

nearly ripe, an official is sent out accompanied by an expert assessor to determine the appraisement (zamán bandi) on The kauhda of the locality, with two local assessors, assists in the work. A representative of the Gichki Sardár, or sometimes the chief himself, accompanies the party. When the appraisement has been completed, a field-to-field appraisement statement is submitted for each locality, and the cultivator is meanwhile permitted to harvest his crop; he may subsequently elect either to pay the revenue through the kauhda in kind or to remit its value at the current rates in cash. The produce revenue received is sold locally. Zarr-é-sháh is generally collected in July and August, a munshi, duffadár and two sowars being deputed for the purpose to outlying districts, where they are assisted by the local kauhda. The Gichki chief also sends a representative.

Zarr-ė-nakhil is also determined by the Khán's officials with the help of the local headmen, an assessor and the gastr. The fruit-bearing trees are classified, and the assessment is fixed and realized at once.

Pas-gatta is collected by levy sowars, and the only occasional departure from this system is in Kolwa, where batái is sometimes taken, especially from crown lands.

The revenue-takers are generally in the habit of taking advances from the násim on the credit of their share. At the end of each financial year all shares are calculated in the násim's office, and after deducting advances and the share of expenses, the balance is handed over to each shareholder.

Village headmen, their remuneration, &c. Headmen play an important part in the collection of the revenue, cattle tax, and other dues, and in some instances, indeed, are almost entirely responsible for it. The headman is known as mastar-kamásh or kauhda, the latter being most common. All dry-crop tracts (kúcha) are divided into so many rés, and each rés has a sub-kauhda subordinate to the kauhda mentioned above. In irrigated areas (shahristán) every village has a kauhda of its own. To every village of importance and to a cluster of three or four hamlets there is an officer called a gasir who looks after the interests of the revenue-taker, finds forced labour when required, and in some cases, such as Turbat, Apsar and

lúsak, collects grass, wood and other supplies for the levies. Gazirs are generally paid their wages by the land-holders.

LAND REVENUE.

Kauhdas either hold the whole or a portion of their land revenue-free or receive annual cash allowances.

grants.

All holders of revenue-free grants are liable to military Revenue-free service (lánk-bandi) when called upon. The largest holders are the Naushérwánis, Mírwáris and Sardár Khél Bízanjaus, who have generally acquired their rights either by gift from the rulers, or by intermarriage with the Gichkis, or as blood compensation.

Petty revenue-free holders.

Revenue-free holders, but of minor importance, are those known as barát-wár and muab. Barát-wár holders are those to whom crown lands have been given from time to time for services rendered, such as assistance in the capture of a fort. The Gushtangi Isazai Hots in this way hold Sijaman, Sorago, Hot-ai-jo, and Kani-é-sar in Turbat for assisting Shéh Omar Gichki, the contemporary of Nasír Khán I.

Muab holdings are small areas held in proprietary right by headmen and others, the revenue of which has been remitted. They are either permanent, in which case they are invariably held under the terms of a document, or temporary for the lives of the holder. Sometimes they are given for political considerations.

> FINANCIAL RESULTS.

The following is an analysis of the land revenue realised in 1903-4. Details for other years are not available. total amounted to Rs. 24,135. Details of the realizations under different heads are given in the margin. Of the total, Rs.

Produce revenue 6,559 Rs. 13,971 (repre-Cash Assessmentsenting zarr-é-sháh (a) Zarr-é-Sháh 6,330 Rs. 5,756, revenue (b) Tobacco & pomegranate seed. on dates Rs. 7,925, 391 (c) Dates and revenue on to-... 10,005 Cattle tax bacco Rs. 290) were 350 realized in Kéch and Income from confiscated lands 500 Kolwa from Turbat, Apsar, Júsak, Kaush-... 24,135 Total Rs. é-Kalát. Kalátuk.

Nodiz, Násirábád and Churbuk, Tump, Nigwar, Dasht, Kulánch, Gwarkop and Jamák, Kolwa, Buléda, Kikkan. including the income from the Government lands; while FINANCIAL RESULTS.

Rs. 2,755 (representing sarr-é-sháh Rs. 574, revenue on dates Rs. 2,080, pomegranate seeds Rs. 40, and miscellaneous cash recoveries Rs. 61) were obtained in Panjgúr, from Sari-Kaurán, Washbod, Garmkán, Chitkán, Isai, Bunistán, Kahn-é-zangi, Duzanáf, Tásp, Sari-Kalát and Eráf, Dumb, Sorwán and other kúchas.

The produce revenue realized in the same year amounted to Rs. 6,559, of which Rs. 5,501 were derived from Kech and Kolwa and Rs. 1,058 from Panjgur. This consisted of realizations on cereals, principally wheat, barley, beans and juári.

Realizations on account of the grazing tax in the year amounted to Rs. 250 in Kéch and Kolwa and Rs. 100 in Panjgúr. The income from confiscated lands amounted to Rs. 500.

MISCELLANE-OUS REVE-NUES. Octroi and transit dues.

Octroi and transit dues, both of which are known by a single term, sung, were levied by every petty chief in former times, both on the exports and imports of the country, the rates of which always depended on the caprice or the pressing necessities of the Sardárs. The system was a great impediment to trade, as the collection of the dues rested with the sowars and dependants of each dominant chief, and, in the event of dispute, the whole property of the traders was frequently seized until the demands were satisfied. For its own part, the Kalat State appears to have originally assessed all goods borne by caravans at a uniform rate of 1 Kásháni rupee (i.e., 12 annas) per maund, and the sums received by the State were considerable. They amounted in 1840-41* to Rs. 3,708 for Kéch and Makrán and Rs. 3,136 for Mashkai and Kolwa. This rate was subsequently reduced to 8 annas per maund in accordance with one of the terms of the treaty concluded with the British Government in 1854, but whether the lower rate was adhered to in Makrán is unknown.

In 1891-2, when the revenue administration of the country devolved on Mr. G. P. Tate, the imposition of transit dues was abolished, and a system of octroi, based on local information, was established. The realizations amounted to Rs. 952 in that year. Octroi is now (1904) realized by

Baluchistan Blue Book, No. 2, p. 219.

the State officials at Isai, Turbat, Tump and Hor in the MISCELLANEinterior, the proceeds being divided between the Khán and the Gichkis. The total collections in 1903-4 amounted to Rs. 2.600. The schedule of rates at which goods are assessed varies with the commodities. The sum Rs. 2,600 does not include the proceeds of the contracts given for the coast ports to which reference will he made later.

OUS REVE-NUE.

In the Rakhshán valley the Khárán Chief levies transit dues at Zaiak, Shíréza, Nág-é-Kalát and Kénagi Cháh and in the Rághai valley at Kullan-é-dap and Tank. The rates are 4 annas per camel and 2 annas per bullock or donkey. whether loaded or unloaded. The total amount levied annually is estimated at about Rs. 4,000. Caravans lifting consignments of local ghi and wool from Rakhshan have to pay Rs. 8 and Rs. 10 per camel load, respectively. In Gichk transit dues are taken by the Gichkis at the rate of Rs. 1-4 on a camel load of wool and Rs. .2 on 41 standard maunds of ghi.

The trade in liquor and other intoxicating drugs is insignificant. A small quantity of European liquor is consumed by the Hindus living on the coast, and duty at Rs. 1-8 per cent. ad valorem is levied on importation. intoxicants of local manufacture, such as bhang, &c., pay. no dutv.

Liquor and intoxicating drugs.

Previous to the administration of the present názim, court fees were unknown in the country. They are not now required on ordinary petitions to the násim, but are recovered in civil suits relating to money and land at the rates levied in British territory. Cash payments are received instead of stamps. The revenue from court fees is supplemented by recoveries in the shape of fines in criminal and political cases.

Court fees and fines.

In the Rághai and Rakhshán valleys, the Khárán Chief's Náibs seize enough of the offender's live-stock to cover the amount of a fine, when default is made in payment. additional amount of Rs. 2 per camel or R. 1 per bullock is taken as muhassili, or compensation for the trouble of capturing the animals.

Under the term "Customs" are included the proceeds of a tithe on all fresh fish landed at Pasni, with Kalmat and

MISCELLANE-OUS REVE-NUE. Shamál Bandar, and at Jiwnri and Ganz, as well as the dues payable on imports and exports, both by sea and land, at these ports. The right of collection is leased to contractors. The last Pasni contract, which was sold for a period of two years, expired on the 31st of May, 1905, and fetched Rs. 16,000. The sum realized has risen considerably in recent years owing to the construction of the bridle-path between Pasni, Turbat and Panjgur, the opening of the steamer service, and the consequent gravitation of the trade to the port. A new contract has now been sold for Rs. 18,000 for one year commencing from the 1st of June 1905. The last contract for Jiwnri was leased for Rs. 15,500 for two years in March 1904 and has not yet expired.

Formerly, one-twelfth of all fresh fish was recovered by the administration, but the rate has been increased to one-tenth.

The system of levying dues is somewhat complicated. Goods brought by sea pay customs duty at the port of entry, and are liable to pay octroi on re-export by land if bulk has been broken. Otherwise they may be re-exported without further payment. A similar rule applies to articles which are re-exported by sea. Goods which are merely transhipped pay no duty.

Octroi is levied on goods imported by land which are intended for local consumption, and customs duty is paid on goods intended for export by sea.

Almost all articles of merchandise are liable to duty whether for octroi or customs either at the rate of Rs. 2-1 per cent. ad valorem on foreign goods or at Rs. 2 per cent. on local goods. Special provisions, however, apply to certain articles, such as dwarf palm, dates, cotton and mangrove timber. One band or man's load, i.e., 10 or 15 seers, is payable in kind on every camel load of dwarf palm brought to the ports, and, on exportation, a further tax of 8 annas per cent. is levied ad valorem. Similarly, one mat is taken in every ten on arrival at a port, and an additional tax of 3 pies per pair is payable on exportation. Dates imported from Kéch and Panjgúr pay octroi at 8 annas per camel load, but no octroi is payable on the return loads of such animals. All raw

[•] This term is applied to goods from Persia, Arabia, etc.

cotton produced in Kéch has to be brought for shipment MISCELLANEto a Kalat port and pays export duty at 2 annas per maund. The import of raw cotton is free. Mangrove wood. when exported from Kalmat, is required to pay duty at the rate of Rs. 40 to Rs. 60 per boat load. All articles imported or exported for Government purposes are exempt from payment of dues. With slight modifications, the same principles regulate the contract for liwnri.

At Gwadar a similar system is followed, but the duty levied on imports and exports was at the rate of 5 per cent. ad valorem in 1903. A tithe on all fresh fish landed at the port is also collected.

Salt was not liable to duty till 1903, in which year the monopoly for the manufacture and sale of salt produced at Pasni and Kalmat was leased for two years ending with the 31st of May, 1905, and fetched Rs. 365.

Salt.

Cattle pounds are controlled by the nidbat officials. The Cattle pound rate of fines imposed are as given in receipts and the margin. The receipts amounted Camel to Rs. 45 in 1903-4. The income from Bullock the sale of unclaimed property, con-Donkey fiscated lands and other miscellaneous Goat or Sheep sources amounted to Rs. 1,350 in the same year.

Reference has already been made to the system known as Levies and lánk-bandi, which existed in former days, and under which military service had to be performed by all persons whether revenue-paying or revenue-free, whenever occasion required. In pre-British days, the expeditions deputed by the Khans never stayed in the country long, and it does not appear that the Khan's Náibs, such as Fakir Muhammad, Bizanjau, were ever supported by any considerable force. So far as is known, they were accompanied by less than twenty levies. It is only within recent years that levies have been regularly maintained in the country.

ARMY.

Regular troops were first located in the country for a Britishtroops lengthened period in 1891, when those which had originally in Makrán, formed Sir Robert Sandeman's escort during his second 1891 to 1893. mission to Makrán were left with Mr. Tate. They consisted of detachments of the 127th Baloch Light Infantry, 36th Bombay Cavalry, and two guns of No. 1 Kohat Mountain

LEVIES AND

Battery. Their head quarters were at Chitkan in Panjgur and a detachment of fifty rifles was sent to Buléda early in April 1891, for a short time, and the fort at Turbat was garrisoned by another detachment of fifty rifles. A body of sixty levy sowars armed with snider carbines was also maintained who held posts in outlying districts, and kept up the lines of communications. The troops were withdrawn in April 1893.

Next year the necessity of the Khan garrisoning the country with his own troops by raising and maintaining a sufficient body of disciplined men to ensure orderly administration was pointed out, and the Kalát State troops were raised. Some of them accompanied the Khán on his visit to Makrán early in 1896, and, on the surrender of the forts of Nág and Násirábád, the former was occupied by twenty of the Khán's levies, and the latter with a garrison of seventy-five infantry. A small force of troops and levies was also left to support the authority of the Náib in Panjgúr. At the time of the disturbances of 1808, the numbers had been increased to 260 men, of whom 200 were infantry, nearly all Punjabis, and sixty were Bráhui camelry. They garrisoned Buléda, Tump, Turbat and Panigur. As a result of the re-arrangements made after the rebellion had been suppressed, these troops were disbanded at the beginning of 1899, and their place was taken by tribal levies raised under the orders of the new násim. These consisted, in 1904, of seventy-nine horse and eighty-one foot, and garrisoned all the important forts.

Duties of · levies and armament.

The levies not only maintain order and do the work of police, but they assist in the collection of revenue, escort prisoners, collect supplies, and make themselves generally useful. They are armed with snider rifles and carbines, and wear kháki uniform. Their total cost in 1903-4 was about Rs. 35,640 per annum.

Makrán Levy Corps. In 1904, the Makran Levy Corps was organised under two British officers, with its head quarters at Panjgur. It is paid for by the British Government, and the Assistant Political Agent for Makran is also ex-officio Commandant of the Corps. He is assisted by an Adjutant. Its object is to ensure a better patrol on the British side of the Makran border and the proper enforcement of the authority of the

Khán as represented by the názim of Makrán. The Corps is composed mostly of Brahuis with a sprinkling of Baloch. The native officers represent practically all the leading sections of the Brahui tribes. The men are armed with Martini-Henry rifles and carbines.

LEVIES AND ARMY.

TAILS.

Owing to the absence of any systematic form of government, jails did not exist in former times, nor are regular jails maintained at present. Under the indigenous system, nearly every crime is punished by the payment of compensation or fine, and imprisonment is only inflicted in default of payment or of finding security for doing so, the term being indefinite, and release being obtained on the recovery of the compensation or fine. As the country is very free from petty crime, the number of criminals committed to iail is insignificant, and, during 1901, only thirteen prisoners were confined in the Turbat fort.

Besides Turbat, other places used for confining prisoners They are sometimes handcuffed are Tump and Isái. and put in chains. Their daily ration consists of threequarters of a seer of flour, which is supplied by the local administration, and they are employed to look after Government gardens and in repairing Government buildings.

No means of education are available, and the bulk of the population is entirely illiterate. A few boys obtain instruction in the Korán, from the local mullás, generally in maktabs or schools attached to mosques, from which they go on to elementary Persian. In individual cases, where the elementary stage is passed, students from Panigur betake themselves to Kandahár to study theology, while those from Kéch proceed to Tatta in Sind. It is remarkable that nearly all the mullás and gásis are derived from the lower classes. the Darzádas and sometimes the Loris. There is, indeed, only one Baloch mullá in Kéch. A few of the remaining

EDUCA-TION.

Medical aid was first made available in 1891-2 through the medical officer in charge of the troops forming Mr. Tate's escort; a hospital assistant was deputed to Makrán

mullás are Afgháns.

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after the administration of the country had been vested in the present násim, the annual cost being Rs. 1,200. No statistics of the work done are available. Since 1904 a dispensary has been opened in Panigur, where medical aid MEDICAL.

is available to the public. It is in charge of the Assistant Surgeon with the Makrán Levy Corps, and the establishment consists of one compounder and three servants (1905). The dispensary has accommodation for twelve indoor male patients.

Prevalent diseases.

So early as 1860, Assistant Surgeon H. Cook, * in medical charge of Kalát Agency, who travelled through the country, wrote that fevers of a peculiarly bad type, accompanied by great hepatic derangement, were rife, particularly at the season of date-ripening (August). The diseases most commonly met with by the medical officer with the troops, in 1891, were malarial fever, diseases or disorders of the digestive organs, and acute and chronic ophthalmia. Acute and chronic bronchitis, ulcers of the extremities in various stages, diseases of the skin, and chronic rheumatism were also found to prevail.

Two types of fevers are recognised by the natives—goharitap, or fever and ague, and garmi-tap, or fever accompanied by high temperature, which is believed to last for three, seven, fourteen, twenty-one, or forty days. Hooping-cough, called karántít-é-kullag, prevails periodically among children, and sometimes causes mortality. Among the hill Baloch, a cough called samag is much dreaded. It is said to be caused by a fly of the same name entering the throat. Only graziers suffer from the complaint. A mixture of ghi and tobacco is used as a remedy. Many kinds of sores, ulcers and tumours occur, the local names of the different kinds being som, chippok, sumbok and burruki. Cases of the latter are generally fatal. Diarrhæa, dysentery (dor), and colic are also not uncommon, while general debility, due to bad nutrition, is frequent.

Among the poor of Kéch, Kulánch and Dasht, whose staple food consists of boiled sardines and *laghati* dates, there is a general complaint of night-blindness, called *shapi-korag*. It is attributed to the entire absence, in their diet, of *ghi* and other fatty substances. It is alleged that a cure may be effected by the part of a sheep's liver called *shapi-korag*.

Epidemics.

Epidemics which visit the country are cholera, small-pox (grampuk), and chicken-pox (sohrak).

[•] Transactions of the Medical and Physical Society of Bombay, No. VI, New Series, 1860.

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Haji Abdun Nabi has recorded an outbreak of plague in Kech in 1838.* He estimated the loss of life at 1,500 persons, the largest mortality being among the women and children. The season at which cholera generally appears is the time of the date harvest-August and September. Only one epidemic of cholera occurring in winter is remembered, and this was not severe. The first known outbreak is said to have occurred about 1857 and to have been followed by a second outbreak in the succeeding year. Cholera appeared in a severe form in September 1902, when upwards of 1,200 people were carried off in Kéch, the localities principally infected being Buléda, Dasht and In two villages of Buléda, Sulo and Chip, 103 lives alone were lost. The disease is said to have been introduced from Karáchi. Much of the mortality occurred among the poorer classes, chiefly immigrants from Zámurán, Dizzak and Sarbáz, who had come to the country in search of labour. Panigur escaped owing to the people of the place having imposed strict land quarantine against any influx of population from the infected areas.

A serious epidemic of small-pox preceded the outbreak of cholera in 1902, and caused much loss of life among the infant population. The mortality in epidemics of small-pox is generally reckoned at 90 per cent. of those attacked. Chicken-pox visited Sami about 1900, and seventy persons succumbed to it.

The people, it may be remarked, are fully aware of the efficacy of segregation, and resort to it on the outbreak of all contagious diseases. After segregation, only such persons as have previously had small-pox are allowed to approach the patient. If such persons are not available, poor people are engaged for the purpose who pay little attention to their duties, and it not infrequently happens that the victim succumbs owing to want of nourishment and care. An instance is quoted of a number of persons afflicted with small-pox being abandoned at Shahrak, in consequence of which all died. The segregation camp is studiously avoided by those who are well, and the dead are removed by persons who have already had the disease.

^{*} Journal, Asiatic Society of Bengal, CLIV, 1844.

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There is also a general belief in infection being carried by flies.

Vaccination and inoculation.

Vaccination is unknown, but would probably not meet with opposition if introduced. Inoculation is popular, and supplies the place of vaccination. It is only practised when an epidemic of small-pox is prevalent.

The method of inoculation is practically the same as in other parts of Baluchistán. An incision is made with a razor on either the upper or lower side of the wrist, and then a small-pox pustule and a grain of wheat are inserted. An eruption follows in a few days. Such articles of food as are likely to produce heat in the body are given to the patient, as they are believed to accelerate the appearance of the eruption. The diet consists of flesh, fowl, beans and másh cooked without ghi or spices.

Every Makrani believes that inoculation is only efficacious if performed by a Saiad, by his representative (khalifa), or by a person authorised by a Saiad. The number of Saiads is limited to one family in Panjgur, and the facilities for inoculation are not, therefore, great. A Kahéri Shéh from Kachhi, who has been in Kéch for some years, did a good deal of inoculation in 1902.

The usual fee is 4 annas both for children and adults. In addition to this fee, any ornament which the person inoculated may be wearing on the right hand, such as a ring or bangle, is given to the operator. Men of means sometimes bestow a cow, camel or a horse on him.

Indigenous remedies and medicines.

Nearly all ailments are attributed by the people to the action of djinns or evil spirits, and consequently, in native practice, charms from Saiads or mullás form the most conspicuous means of cure. In cases of fever and ague the dry leaves of the fig tree, husks of rice, or frankincense are burnt to drive away the spirit by the smoke.

In cases of prolonged fever, the patient is wrapped in the skin of a female goat in summer and in that of a male sheep in winter. A brown or black skin is preferred. The animal must be killed at night, with closed doors, so that any chance of exposure to the heavens may be avoided. At early dawn the skin is removed from the patient, and hung on a tree at a distance from the house. Immediately after, barley or arsun flour is rubbed on the body. This

cure, which is believed to be unfailing, is called post.

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Chicken soup is a common remedy in milder ailments, and branding is not infrequently resorted to in more serious cases. For sore eyes a stone, called *singistán*, is boiled seven times, each time with a separate sheep's head, after which it is rubbed in human milk and the water of a *hukka* or, in their absence, in plain water, and the fluid is applied to the eyes. For colic, a little gunpowder mixed with water is drunk, or a yellow hen is killed, and its intestines, etc., are bandaged over the affected part.

Cases of lunacy are attributed to the attacks of djinns, and a mullá, who is called in to cast out a djinn, is called an amil. He usually commences his charm by invoking the aid of Sháh Bakhtánús, the king of the djinns, and the two monkeys of Habbash (Abyssinia) and Zang (Zanzibár), and, after a wrangle with the spirit, is supposed to make it swear not to return to the person affected on the penalty of having a seal affixed to its head. There is an implicit belief in the efficacy of this treatment, and the mention of the two places in Africa is of folklore interest.

No sanitary arrangements of any kind exist either in the towns or villages. The sweepings and filth are gradually heaped in front of the houses, until they have accumulated in sufficient quantities for removal to the fields as manure. Along the coast, the foreshore is used for the deposit of filth of every kind, including human excreta and the offal from the fishcuring operations, the result being most unpleasant.

Drinking water is obtained in most places from kárézes, but pools in rivers and wells are also used. The supply from kárézes is generally good. Where drinking water is obtained from pools, bathing and washing also take place in the same place.

The survey of the coast west of Gwadar was made by Lieutenant Brucks in 1828-9, which was followed in the latter year by a further minute survey under Lieutenant Haines in the *Benares* who carried it as far as Karachi. The Makran coast had previously been only slightly laid down by Lieutenant Maskal. Subsequently, Commandant Constable and Lieutenant Stiffe, of the Indian Navy, were employed in the *Euphrates* in 1857-8 and in the *Marie* in 1858-60 for survey on the Makran coast and in the

Village sanitation and system of water supply.

SUR VEYS.

SURVEYS.

Gulf. The results of their surveys have been embodied in the excellent Admiralty Chart* which is supplemented with much information in the *Persian Gulf Pilot*.† This compilation states that the bank of soundings on the Makrán coast is narrow, and ends abruptly in some parts quite precipitously, at its outer edge, which is in general about 15 miles from the shore. The soundings are generally regular, the bottom being rock, sand, and mud near the shore, and mud or clay beyond the depth of 12 fathoms; they generally increase gradually up to 20 fathoms and beyond that depth very rapidly. Special surveys of Kalmat were made in 1891 and 1902.

Maps of the interior of the country, based on a reconnaissance survey, have been published by the Department of the Survey of India on the 16-mile, 8-mile, and 4-mile scales. They were made between 1891 and 1893. Triangulation connected with the great Indus series was extended into Makran between 1896 and 1898, but the work came to an abrupt conclusion owing to the rising which occurred at the end of the latter year.

^{*} Published at the Admiralty, London, 31st December, 1874.

[†] The Persian Gulf Pilot by Captain C. G. Constable and Lieutenant A. W. Stiffe, London, 1898.

CHAPTER IV.

MINIATURE GAZETTEERS.

KULANCH. Kulanch is the third largest unirrigated tract in Makrán; Dasht and Kolwa alone being more extensive. For administrative purposes, it consists of the strip of country between the slopes of the Koh Dramb on the west and Saiji on the north-west, the eastern boundary of Makrán near Kalmat on the east, the sea on the south and the Talar branch of the Makran Coast Range on the north. It thus includes the plain country known as Kulanch proper, about 45 miles long by 20 wide on the west; the sandy flats round Kalmat on the east; and the part of the coast range inhabited by the Sangurs to the north-east of the Shadi Kaur. The coast-line, which extends for about 120 miles, is low and consists of sand dunes covered with occasional patches of low tamarisk and acacia, except where the coast range runs down to the sea between the Rumbar and Shádi Kaur rivers and the low hills west of Shamal Bandar. The most conspicuous headlands are Jabal Zarrén (418 feet), Rás Shamál Bandar (663 feet), Ras Shahid and Ras Kappar (641 feet). Nearly due south of Kalmat lies the island of Haptalar or Astalo. Most of the cultivated area of the country lies about 15 miles from the coast to the north of the low ridge running east and west known as the Chakkuli Koh which divides the Kulanch valley proper in the centre. The general appearance of this valley is a flat plain (pat) intersected by hill torrents and well wooded at the eastern end. The northern portion is more level and better cultivated than the southern side. It lies about 350 feet above sea-level.

The Talár-é-band portion of the Makran Coast Range stretches in a prolonged ridge along the whole of the north-

Physical aspects and conformation.

Hills.

ern side of the country. Its principal features have been described in Chapter I of this volume. The highest peak. north of Kulánch, is Rizdán (2,383 feet). The confused mass of hills to the north of Pasni bay, through which the Brángoli and Rumbar torrents wind their way, is noted for its excellent pasturage, especially the valley of the Rumbar. The native proverb says: "The valleys of the Asi, Dosi, Brángoli, Bahri, Shádi and Gurráni are nothing compared with the garden of Rumbar." The Chakkuli Koh rises to about 1,400 feet and is easily practicable. To the south of it lie the cultivated areas of Kandasol and Pat. The hills forming the cliffs and headlands along the coast, to which reference has already been made, consist of jagged ridges The most westerly is Koh Dúmag or of white clay. Jabal Zarrén near Pasni forms a conspicuous Dímag. point.

Rivers.

Besides the Shadi Kaur which has been described in Chapter I, the only other stream of importance is the Sawar. It is formed by the junction of the Kannéro, Chilari and Bélár streams which rise in the Talar-é-band and unite at a place called Sawar-é-tank, where they break through the Chakkuli Koh. The course of the stream lies nearly due south and, after being joined by the Nalént torrent from the west, falls into the sea through a large salt-water creek. It is covered with a thick jungle of tamarisk and some dwarf-palm. It has no permanent supply of water. The Rumbar and Brangoli constitute the only other hill torrents worthy of mention.

Botany and fauna,

The part of the upper Kulanch valley between Sar-Dasht and Nokbur lying along the skirts of the Chakkuli Koh is thickly clothed with tamarisk and acacia. The Kulanch hills contain abundance of mountain-sheep and Sind ibex, which are celebrated for their size. Besides the fishing centres of Pasni and Kalmat, fishing is carried on at Kappar and Shamal Bandar, the latter place being a bay to the east of the cape of the same name where small vessels can obtain shelter in westerly winds.

Temperature and rainfall, The climate is hot, but the proximity of the coast and the consequent sea-breezes render the heat less oppressive than in the Kéch valley. The rainfall is very scanty and some-

times none occurs for several consecutive years. Most is received in winter.

MINIATURE GAZET-TEERS.

The histories of Kulanch and Kech coincide. The valley History and is said to have been uncultivated and uninhabited except by graziers previous to the settlement of the Jadgáls who migrated from Sind via Béla to Panigur and thence to Buléda. After serving the Bulédais for some time their turbulence caused them to be transported to Kulánch by the Bulédais. A local event of historical importance is the expedition of Mir Abdulla Khán of Kalát (1715-16 to 1730-31) against Kulanch, the stubborn resistance made by the Kulánchis on the Drámb mountain and their massacre through the treachery of the Jadgals.

archæology.

The total population of Kulanch is about 1,400 families Population or 7,000 souls. The permanent villages number seven, Pasni, the head quarters of the local administration; Nokbur, that of the Kauhda of Kulánch; Kallag, the headquarters of the Mulláis; Nalént, Bán, Kappar and Kalmat. The chief groups are the Jadgals numbering about 150 families or 750 persons who live round Kocha; the Bands numbering about 250 families or 1,250 persons living in Nalént; the Mulláis about 15 families or 75 persons living at Kallag; the Kalmatis 32 families or 160 persons living at Pasni and Kalmat; the Sangurs of the coast hills about 500 families or 2,500 persons and the Méds who live at Pasni. Others are the Wádéla, immigrants from Wad in Ihalawán, as their name implies; Puzh from Mand; Kallagi; Patti belonging to the Kahéri tribe of Shéhs; Kappari who style themselves Hots: and Sardashti an offshoot of the Bands. The religion of the majority is Zikri; the rest are Sunni Muhammadans. Kallag in Kulanch is the head quarters station of the chief priest of all the Zikris of Baluchistán. The occupations of the people are cultivation, flock-owning, fishing and transport business. The principal mart is Pasni and shops are also located at Tarr in Kalmat.

Nearly the whole of the cultivated lands are situated Agriculture. along the western and northern sides of the Kulánch valley proper. The whole is rain-crop area, the floods being caught

by embankments. Owing to the capricious rainfall, agriculture is precarious. A dam across the Sawar-é-tank is said to have been constructed in former days, which more or less ensured permanent cultivation, but was long since washed away. The soil is whitish clay mixed with sand and is fertile. The cultivable plains are known as pat. A large extension of cultivation is possible.

Crops.

The principal crops are sohro (juari), cotton and másh. Kulánch cotton is famous but its cultivation depends on seasonable rains. Among miscellaneous crops may be mentioned wheat, barley, parmásh, arsun, melons and dates. The cultivators supplement their means of livelihood by flock-owning and camel breeding. One of the features of Kulánch is its possession of large numbers of camels which are estimated at 3,000. Every household possesses one or more. Round Kalmat also the Sangurs own large flocks of camels, sheep and goats. The trade of Pasni with the interior is largely carried on camels from Kulánch.

Communications. The main route from Gwadar to Kéch traverses the west of the area. In the centre lies the bridle-path from Pasni to Kéch. Pasni is also connected by practicable tracks with Sar-dasht, Nokbur, Kallag and other important villages. A path over the Hur pass, practicable by laden camels, leads from Sar-dasht to Kéch. The principal route from east to west lies along the Indo-European telegraph line from Kalmat to Sarchib. The water-supply from wells is deep but good.

Administration and revenue arrangements. The country is administered by a naib who lives in Pasnand is assisted by one jemadar with three levy sowars, one havildar and seven footmen and two munshis. The Kauhdas of Kulanch helps in revenue work, in return for which he holds his lands in Kulanch revenue-free. The minor Kauha das of each res receive a remission of the revenue due on their personal lands in payment for their services, thile amount being realized against the half share of the Gichkis in the revenue and not against the Khan. For revenue, purposes, Kulanch is divided into the following tracts (res).

each of which is assessed to Zarr-é-Sháh in addition to revenue in kind :-

GAZET-TEERS.

	NAME OF	rés.				Zar	r-é-Shá
(1)	Nokbur		·			Rs.	150
(2)	Kocha	•••	•••		•••,	,,	155
(3)	Kappar		•••	•••		,,	205
(4)	Sardasht and	Pat		•••		,,	160
(5)	Bán		•••	•••	•••	,,	150
(6)	Bélár and Kar	ndasol				,,	155
(7)	Nalént					,,	150
(8)	Kallag	•••	•••	•••		,,	75
(9)	Pasni and Ka	lmat	•••	•••		. ,,	320
(10)	Jamak and G	war-Ko	p	•••		,,	280
		•					<u> </u>
			To	otal		Rs.	1,800

The Zarr-é-Sháh of Pasni and Kalmat is remitted as customs. and tithes in kind on the fish landed are levied instead. Gwar-Kop and Jámak, which were formerly included in Kulanch for payment of Zarr-é-Shah, are now separately The Gichkis of Kéch are entitled to half the revenue. Cattle tax is levied at ordinary rates. trees are not assessed.

Salt obtained from the evaporation of sea water is collect- Miscellaneed at Wád-Rop near Pasni and at Shinzáni.

ous.

Pasni (25° 16' N.; 63° 28' E.). The sea-port of Kulanch about 220 miles from Karachi, which has lately (1905) come into considerable prominence, lies on the west side of the great Pasni bay and is situated on a sandy spit connecting Rás Juddi and Jabal Zarrén with the main land. anchorage is 11/2 miles from shore, and after April, owing to the surge, it is difficult to land. The number of houses is 305 and the population (1904) numbers 1,489, which has now (1905) risen to 2,000. The majority of the people are Méds (fishermen). A few Kalmatis, Sangurs, Hindus and Lotiahs (Khojas) also reside in the place. It is the head quarters of the náib of Kulánch and of the Kalmatis, whose chief in former days represented the Khan's authority. A small fort, two mosques built by the Meds, and a bungalow, in which the post and telegraph office is located,

Places of interest.

comprise the only permanent buildings. The rest of the village is composed of dwarf-palm huts. The place appears to have been one of considerable affluence in former days, and in 1581 we hear of Luis de Almeyda, the Portuguese, burning "the rich and beautiful city of Pesani." The site of the city is still shown by the people to the north-west of the present village. The latter, whose construction dates from within living memory, has received its recent impetus owing to its proximity to Turbat, the headquarters of the Makrán administration, about 65 miles distant. Efforts have been made to improve communications between the two places, and Pasni has become a fortnightly port of call for the steamers of the British India Steam Navigation Company since 1903. As a result, most of the trade of Makran has now gravitated to the port, and the biennial customs contract has risen from Rs. 9,000 between 1900 and 1902 to Rs. 16,500 between 1903 and 1905. Almost all the trade is in the hands of Hindus and Lotiahs or Khojas. The chief exports are wool, ghi, cotton, dates, dwarf-palm, mats, konar (the berries of the dwarf-palm), fish, shark-fins and fish-maws, and the chief imports are piece-goods, sugar, oil, grain and flour. In 1903, previous to the commencement of the steamer service, the trade was valued at about Rs. 1,08,876, Rs. 57,540 being imports and Rs. 51,336 exports. Goods from Ormára are brought by country boat for transhipment to the steamers. After the commencement of the steamer service the trade shows a considerable increase. figures for the two periods, 1st June 1903 to 31st March 1904 and 1st April 1904 to 25th February 1905, indicate that the imports during the first period amounted in value to Rs. 1,30,000 and the exports to Rs. 79,900; and during the second period the imports to Rs. 1,62,000 and the exports to Rs. 1,17,500. The imports include piece-goods, grain and miscellaneous articles, and the exports, wool, ghi, cotton, dates and mats. The only industries are fish and fish-curing, of which a full account has been given elsewhere. The port (1903) contains four large native crafts (dangi) and about sixty small fishing boats. There are now (1905) 125 boats, one of which is capable of carrying 2,000

maunds. Watch and ward is performed by two chaukidars who are paid from a cess levied in the town.

MINIATURE GAZET-TEERS.

Kalmat, the Calama of Arrian when describing the voyage of Nearchus, is the largest inlet on the Makran coast lying 190 miles from Karachi, 25°-25' N.; 64°-2' E. The hor or creek lies within the sandy stretch extending from Ormara to the Rumbar river, to the western portion of which the name Kalmat is also applied. The entrance to the creek is shallow and no channel navigable by large vessels exists, the depth of water not being more than 2 feet at ordinary spring tides. Native craft (dangi) drawing 8 to 10 feet are said to enter the creek by the easternmost of the two channels of approach. Surveys made in 1891 and 1902 indicate that within the bar as much as 46 feet of water is to be found in places. Four subsidiary creeks join the main creek known by the names of the Jáfri, Mákola, Chilli and Shári Shép and are thickly clothed with mangroves. The only permanent habitations consist of a cluster of seven houses known as Tarr on the western bank, five of which belong to Hindu traders; the total number of residents is 28 souls. In the surrounding country live Kalmatis and Sangurs numbering about 1,000, of which about nine-tenths are Sangurs. The water-supply from wells at Tarr is brackish and exceedingly scanty. The trade is small. The chief exports consist of dwarf-palm in its raw state, lime and mangrove wood; the imports are piece-goods and food-grains. The history of Kalmat centres round the Kalmatis, an account of whom has Their hero, Hammal-é-Jihand, been given elsewhere. resided at Gazdán, where a stone-lined well built by him is still to be seen. At the latter place is situated the splendid fishing area to which hundreds of native craft come during winter from places so far afield as Cutch on the east and Lingah on the west for kirr and mushko fishing. The local Baloch (known as pádi or landlubbers) confine their operations to the creek. Shell-lime, which is much esteemed by the fishermen of the coast for water-proofing their fishing gear, is manufactured at Gazdán to the extent of about 20,000 small bags per annum. Each bag contains about 2 seers. Pearl oysters are said to be occasionally

obtained in the creek. Only one fishing boat and one small cargo boat belong to the place. The local Sangurs have large flocks and many camels. A little dry-crop cultivation is to be found at Mákola where water in wells is plentiful.

The boundary of Kalmat on the east is disputed between the Las Béla State and the Makrán administration. The Las Béla State claims anchorage (langári) at Rs. 2-8-0 on all boats anchoring on the east side of a line drawn southward from Mákola. The contract for customs at Pasni includes that of Kalmat.

Haptalar, known to the Arabs as Astálo, to the Méds as Astálu, and to the Hindus as Satadíp, is an island in 25° 6', 25°-7' N.; 63°-52', 63°-54' E., lying about 16 miles off the coast and about 26 miles from Pasni. Its length from east to west is about 3 miles and its breadth about 1 mile. is table-topped with cliffs all round, and there is a partly detached hill at its western end 260 feet above the sea which is a little higher than the rest of the island. The cliffs rise perpendicularly out of the sea except at a point about the centre of the north side where there is a little sandy point: in the north-west corner a sandy spit forms a small boat harbour at low tide. The landing place generally used by pilgrims is situated in the north-east corner of the island. The ascent from it is somewhat steep and tortuous and after heavy rains it sometimes becomes impassable when the ascent and descent have to be effected with the help of ropes. There are rocky ledges off both ends of the island and some detached rocks above the water along the south face. The Persian Gulf Pilot states that the island may everywhere be approached by ships to within three cables length. At 7 cables from the centre of the south side is a little islet 20 feet above the water which looks like a boat under sail and has hence been named gurab (boat) by the local fishermen. It is steep and it is unsafe for vessels to pass between it and the island. Further south is the famous chasm, known as Khaddau by the natives, which is said to run from Karáchi to Basrah and is a favourite resort for large sharks which are caught in numbers by the Méds of Pasni.

On the south-east side of the top of the island is an open

shrine made of rough stones about 2 yards square containing a few rough stone images covered with red oxide of lead (séndir). Formerly it is said to have consisted of a stone-built building with a reservoir for water. Local Hindu legend relates that both mysteriously disappeared after having been desecrated by Arabs who threw the intestines of turtles into them. Now, whenever an attempt is made to lay a permanent foundation for the shrine, the bricks are seen scattered by unseen hands and the work has to be abandoned.

MINIATURE GAZET-TEERS,

The island is covered with a luxuriant growth of rank grass and low shrubs, and abounds with small venomous snakes called garr by the natives. The Arabs from Maskat frequent the place for turtle catching and the Pasni fishermen for gwahtag fishing, the latter being an excellent fish which abounds there. They also visit the island to collect the sea-birds' eggs which are found in countless numbers at the end of the cold weather on the cliffs. The eggs are collected by lowering a man in a net.

An atmosphere of mystery and legend has always surrounded Haptalár. It has been identified with the Nosala of Arrian (*Indika 31*) the weird accounts of which frightened the superstitious seamen of Nearchus. Arrian relates the story as follows:—

"Nearchus having now passed the country of the Icthyophagi, was told that there was a barren island in that sea, about a hundred stadia distant from the continent, called Nosala¹; sacred to the sun, and not to be approached by any mortal; or if anybody be so imprudent as to venture on shore there, he immediately disappears, and is seen no more. Whereupon he despatched one small galley, manned with Ægyptian mariners, who having entered the island, vanished out of sight; and his commanders reported that the sailors having rashly ventured to land, were suddenly hurried away.

Note by the translator. We have an account of this island in several authors, especially in Strabo, page 1056, though he names it not; but as his is the same in substance with the first part of Arrian's, it is not necessary here to repeat it. Curtius gives us some faint glimmerings of this (lib. x, cap. 1.5.), for he says that "many ships with slaves and merchandise venturing to an island, for the sake of gold, were never seen afterwards."

However, he afterwards sent a ship of thirty oars, to coast round the island (but ordered them not to attempt to land) and all the way as they sailed along the shore thereof, to call upon the pilot of the ship by name, or any other of the most noted mariners. But when none durst undertake the voyage, he tells us, he attempted it himself, and forced some mariners, even against their will, to attend him on But when they came to make a descent, they found all that story relating to the island, vain and fictitious. However, he assures us, he heard another story concerning it, namely that one of the Nereids had chosen it for her place of residence and that she was wont to have carnal knowledge of all the men who by any accident were forced on shore there; and afterwards she changed them into fish, and sent them into the sea. Whereupon the sun being enraged against her, commanded her to depart out of the island; but she beseeching him to free her from her innate rage of lust, he not only granted her request, but also, that whomsoever her enchantments had metamorphosed into fish, should reassume their former shapes, and become men again; and from these men, thus reduced, he tells us, proceeded the nation of the Icthyophagi, which continued till Alexander's time. As for my part, I cannot forbear wondering, that Nearchus should so far abuse his natural wisdom, and known sagacity, to suffer himself to be imposed upon by a story, when he might have so easily found out the truth, and cannot think it redounds to his honour, unless he deemed the fables and fictions of ancient times so sacred, as not to be contradicted."

Of the names by which it is now known the most ancient appears to be that given to it by the Hindus Satadip. Local accounts differ as to the origin of this name, but that most generally accepted is, that the island is the abode of the goddess Káli Dévi who remains there for seven out of the eight periods into which the day and night are divided. Only in the morning does she leave it to take her bath at Hingláj whence the hemistich:—

" Sat pahar Sata dip mén;

Another story is that the Káli Dévi was the most revere d

[&]quot; Athwen pahar Hinglaj."

of all the dévis and was a virgin, her residence being called therefore the "dip of sat" or lamp of righteousness. A last version states, that, according to Hindu geography, India is divided into 7 dip and 9 khand. The dips are Sangal dip (Ceylon), Swét dip, Jambu dip, Salmáli dip, Kolan dip, Chháon dip and the last or seventh Sata dip.

MINIATURE GAZET-TEERS.

The myth related locally about the Káli Dévi is, that in the satjug or ages of righteousness, before the creation of the world, when all was water, there lived two rákhshas named Mad and Kétab who were born of dirt from the ear of The rákhshas desired to kill Brahma, the creator Naráin. of the world, and Brahma, hard pressed by the rákhshas. took refuge with Bhagwan or Narain. To save Brahma the latter created a devi called Yogshakti (the power of omnipotence) who killed and destroyed the brothers. In the tréta jug the two rakhshas re-incarnated themselves in the two brothers Shumb and Nashumb, who usurped all the kingdom of Indra and appropriated to themselves the offerings of scent and food given to the devas. Thereupon Brahma, Shiv and Bishan and many other minor gods created Kali Dévi, the goddess of war and destruction, who hunted the rákhshas brothers from place to place and eventually killed them at Sata dip where she afterwards took up her abode.

The name used by the Arabs is Astálo and appears to be an Arabicised form of Sata dip or Sata deyo. The Baloch call the island Haptalár, but can give no derivation for the name. Colonel Holdich thinks that it is probable that the Baloch kept the numerals of sata dip and applied them to some existing fact quite independent of the Hindu myth. Hapt in Baluchi means seven and talár a rocky slab or strata, and the name may have reference to them.

The place is held in extreme veneration by the Hindus, and the pilgrims from all parts visit it in small but increasing numbers. Tales are told of sounds of music being heard by persons on boats anchored in the vicinity, and instances are related of dévis having been seen on starlit nights wandering over the hills. Goats are taken to the island for sacrifice, and it is said that only those goats are acceptable to the goddess which make the ascent to the shrine of them-

Dip is said to mean a mountain surrounded by water.

Only the blood is spilt at the shrine, the flesh being selves. thrown into the sea.

The Pasni Méds hold several places in the island sacred, and on a detached rock at the north-west corner are said to be the foot-prints of duldul, the horse of Ali. On the beach close to this rock there is an enclosure dressed with red flags and dedicated to the Khwaja Khizr, the patron saint of the Méds. Here the Méds are wont to take omens at the beginning of each fishing season after performing sacrifice.

Physical asconformation.

Gwadar includes not only the town and port of that name, pects and but the whole country subject to Maskat. This consists of the east and west Gwadar bay and a sandy strip of flat country, from which rise the hills of Jabal-é-Mahdi, Koh-é-Drámb, and various low eminences further to the westward. At the foot of the Koh-é-Drámb lies Gwádar-í-Nigwar, the only cultivated part of the locality.* The rest is known as Gwádari Rék, i.e., Gwádar sands. The whole covers an area of about 307 square miles.

> Great divergence of opinion exists regarding the boundaries on every side except the south. Those given by Captain Ross, who was for several years Assistant Political Agent at Gwadar, are: north, Koh-é-Dramb; east, Barambáb or Barambábád Kaur; and west, Cape Píshukán. These appear to be the limits generally understood by the townspeople of Gwadar, Mir Hayatan motabar of Gwadari Nigwar in 1903, and other Baloch subjects of Maskat regarded the water shed of the Talár range, called Sáiji in Dasht, from the Talár pass to Kandasol, as the northern boundary; a line drawn south from the Talár pass to near Sarchib, eventually terminating at the mouth of the Kárwát torrent, as the eastern limit; and a line running south through Koh-Tungi near Gabd to Ispar-Koh, a hillock east of Ganz, as that on the west.

Subjects of the Khán of Kalát give the Drámb hill as the northern, the Drabbélo stream as the eastern, and the The tract be-Ankárau stream as the western boundary. tween the mouth of the Páléri to Píshukán is regarded as an isolated locality also belonging to Maskat. The bulk of local opinion seems to incline to this view.

^{*} A nignar is the cultivated skirt of a hill.

At Pishukan again the boundary is disputed, the people of that place claiming up to Ispar-Koh, while those of Ganz and Jiwnri consider their limit the western margin of Dagáro Tál, about 2 miles west of Píshukán.

MINIATURE GAZET-TEERS.

The coast line, which extends for about 40 miles in a direct line, is low and consists of sand dunes. The most conspicuous headlands are Sur or Jabal Sur, the north-east point of Gwadar east bay; Gwadar head a hammer-headed rocky promontory 7 miles in length east and west and about a mile wide; and Rás Píshukán a narrow rocky spit.

The Dramb or Dram hills form part of the Makran Coast Hills. Range. Owing to the difficulty of access to them, they have long formed an asylum for the people of southern Makran from Persian incursions. It was here also that the Kulánchis took refuge from Mír Abdullah Khán (1715-16 to 1730-31). The highest peaks are Barn (3,152 feet), Dramb (3,125) and Mukh (3,200). The Dramb range is much frequented by the nomads of Gwadari Nigwar. Chish and kahúr trees are abundant and the water-supply is fairly plentiful.

Jabal-é-Mahdi, so called from its being the original settlement of the Mahdizais, an offshoot of the Sangur tribe, on its skirts, is a mass of white clay hills of somewhat remarkable outline, and with perpendicular cliffs on its south side. A gap of low land 2 miles in width divides it from the Sur headland.

The Koh-é-bátil forms part of the Gwádar headland and is an irregular mass of cliffs of dark-brown colour and about 480 feet high, overlooking Gwadar town.

The area contains no rivers: the Karwat Barambab or Rivers. Barambábád, Sur, and Ankárau are the most important of the hill torrents. All rise in the Dramb hills with the exception of the Ankarau, which rises further north in the southern slopes of the Saiji ridge. The latter falls into the sea through a large salt-water creek on the west of Gwádar.

There is nothing distinctive about the flora, which is Botany and scanty in the extreme. Tamarisk is found in the beds of the torrents, and chish, chigird and kahúr in the plains, except in Gwadari Rék where there are no trees. Gwadar

Fauna.

Miniature Gazetteers: Nigwar possesses a few date groves. The hills contain mountain sheep and Sind ibex, which are celebrated for their size. The sea swarms with fish; fishing is carried on not only in Gwadar bay and at Pishukan but at Sur and off the mouth of the Barambab.

Temperature and Rainfall.

The climate is hot throughout the year, but the proximity of the coast and the consequent sea breezes render the heat less oppressive than in the Kéch valley. The European telegraph officials, formerly stationed at Gwádar, found the place so unhealthy that it had to be abandoned. The stench arising from the sea, apparently caused by mud volcanoes, was at times quite intolerable. In more recent times some improvement has taken place, but malaria is always prevalent, and strangers are generally attacked. The water-supply everywhere is brackish. In Gwádar Town it is obtained from shallow wells and in Gwádari Nigwar from deep ones. In the latter place it is not only brackish but fetid. The rainfall is very scanty and sometimes none occurs for several consecutive years. Most is received in winter.

History.

Gwadar is a very ancient place. One of the domed buildings close to it bears date 1468, but authentic history only begins with the Portuguese in the sixteenth century. The place was known to them as Guadel, and is more than once mentioned in Manuel de Faria Y. Souza's History of the Portuguese doings in the East. In the seventeenth century it fell into the hands of the Bulédais, but was wrested from them by the Gichkis, who obtained permanent possession of the place on the retirement of Taki Khan, Nadir Shah's general in 1739. Reference has been made to these events in the section on History. Not long afterwards, Nasir Khan's frequent invasions of the country ended in the division of the revenues between Nasir Khan and the Gichkis and, for a time at least, Gwadar appears to have been included amongst the places subject to this division.

In the last quarter of the eighteenth century, Gwadar and the surrounding country fell into the hands of Maskat, since which time it has been nearly continuously in Maskat possession. Saiad Said succeeded to the *masnad* of Maskat in 1783 and quarrelled with his brother Saiad Sultan. The latter appears to have fled to Makran and entered into com-

MINIATUR.: GAZET-TEERS,

munication with Nasír Khán, who granted him the Kalát share of the revenues of Gwádar for his subsistence. Saiad Sultán lived at Gwádar for some time, and eventually succeeded in usurping the Sultanate of Maskat in 1797. He died in 1804 and, during his son's minority, the Bulédai chief of Sarbáz, Mír Dostén, is said to have acquired temporary possession of Gwádar, but a force sent from Maskat regained it.

It is generally understood that the right of sovereignty in Gwadar was made over by the Khans of Kalat to Maskat in perpetuity, and at least one eminent authority asserts that the place was made over as a free gift to the Sultans.* This, however, is the view neither of the Khans of Kalat nor of the natives The local opinion is very characteristically expressed in an extract which has been made from a diary in the possession of one Mir Mazár, Mírwári of Málár in It is addressed to the writer's son and runs as follows:--" If somebody asks you whether Gwadar belongs to Kech and how it fell into the hands of the Bu-Saiads of Maskat, tell him in reply that Saiad Sultan was their ancestor and fled from the country of Maskat at the hands of his own relations and came to Zik.† Dád Karím, Mírwárí, accompanied him and went to Khárán and induced Mír Jahángír, Naushérwáni, to join them and they took refuge with Shah Nasir Khan (of Kalat). In the end, the Bráhui army did not go to Maskat to help Saiad Sultán, but at length Mir Nasir Khán ! lent him Gwádar on trust. Mír Nasír Khán said, 'As soon as Maskat is recovered make over Gwadar to me (Mir Nasir Khan).' He has not given it back up to this time."§

^{*} Vide Curson's Persia, Vol. II, pp. 432-433.

[†] Zik is a fortified village belonging to the Mirwaris in kolwa.

[‡] The words used are:—Gwddar—ra ba ariyat amánati dádah. "Ariyat," according to Johnson's Dictionary, means "anything borrowed or lent." "Ariyat dádan—to lend." Amánat means a deposit; charge; anything given in trust. "Amánat dáshtan" to place in trust.

[§] The late Mir Abdul Karim, Mirwari of Manguli, Kalat had a hobby for history and poetry. His books confirm this story, and add that Shéh Umar, Gichki, was appointed by Nasir Khán I to attend on Sajad Sultán.

The Gichkis assert that their moiety of the revenue was not made over to Maskat, but that they continued to receive it after the possession of the place had been made over to Saiad Sultán. It is said that the revenue amounted to 7.000 dollars, and that this sum was distributed into three parts: the Gichki share 3,000 dollars, the Kalát share, retained by the Maskat representative, 3,000 dollars, and the expenses of collection, also taken by Maskat, 1,000 dollars. It is affirmed by the Gichkis that their share of 3,000 dollars was regularly paid to them up to the time of one Bíbi Mariam, a Bulédai lady who was married to a Gichki. This lady is described by Ross in 1868 as living on the charity of the Sultáns of Maskat, but it is asserted by the Gichkis that, as a matter of fact, what she received was hers by right and represented the balance of the Gichki share of the Gwadar revenues to which they had formerly been entitled, but which had been gradually curtailed by the Sultán, especially in the time of Bíbi Mariam. Háji Abdun Nabi wrote of the place in 1839: "The two ports (i.e., of Gwadar and Chahbar) formerly belonged half to the Gichkees (Gichkis) and half to the Brahoees. The Brahoees' half was given in grant by Meer Naseer Khanto the present Imaum's father, Saiyed Sultán, who took refuge at Kalát during some convulsion in his own state." About the time at which Háji Abdun Nabi wrote, Sheh Oásim Gichki advanced on Gwadar and succeeded in obtaining payment of the Gichki moiety of the revenue for two years. Since then, any claims which the Gichkis may have had, have been persistently ignored.

Nasir Khán was succeeded by a line of weak Kháns during whose time Kalát fell into a state of continual turmoil and anarchy. Some of the outlying parts of their kingdom, especially those on the west, were lost and they had little time to think of a place such as Gwádar, but the matter was not entirely lost sight of, for it is stated that Mír Nasír Khán II. (1840 to 1857) sent an expedition under Sháhghási Wali Muhammad to Kéch, one of the objects

[•] Journal of the Asiatic Society of Bengal, No. CLIV, 1844, page 802.

of which was to regain possession of the port. Upon this and in order apparently to enable him to retain possession of the port, the ruler of Maskat sent fifteen negro slaves, five female slaves and a sword to Kalát. Some of the slaves are still alive. In Khudádád Khán's time, about 1860, Mír Fakir Muhammad, the Naib of Kéch, besieged Gwadar with 2.000 men, and only raised the siege on receiving a sum of money. A later expedition contemplated by Khudádád Khán was abandoned owing to trouble with the Naushérwánis of Khárán.

MINIATURE GAZET-

From 1863 to 1879 Gwadar was the head quarters of an Assistant Political Agent.

> Archæology.

To the south-west of Gwadar town are two stone-built domed buildings, now much dilapidated but still showing signs of good workmanship and finish. One bears 873 Hijri (1468 A.D.) as the date of its completion, and an inscription giving the name of Nákhuda Bangi Ismáil, who is supposed to have been a Kalmati chief, as the builder. Three other domes which stood in the vicinity are now in ruins, but are said to have been older than those still stand-

On top of the Batil hill, the ruins of a stone dam of fine workmanship are to be seen. The blocks composing it are carefully mortised into one another. It is locally ascribed to the people who erected the domes at the foot of the hill.

On the top of the cliff overhanging the town, called Sak-é-Bátil, is a stone enclosure supposed to be the work of the nucleus of the Méds, who are alleged to have come to Gwadar from Gandáva in Kachhi.

The total population of Gwadar, including Gwadari Population. Nigwar and Pishukan, was about 1,030 families or 5,150 persons in 1903. With the exception of the Gwadar town, the head quarters of the administration, and Pishukan there are no permanent villages. Of the few temporary hamlets in Gwadari Nigwar, Khia Kalat alone is important as the head quarters of the Nigwar headman. The groups inhabiting Nigwar in 1903 were Kalmatis 20 families, Mahdízais 30 families, Zainozais (a section of the Kulanch Bands) 10 families, Rékáni, indigenous Baloch, 50 families, and 10 families of servile origin.

Miniature Gazetteers.

Gwadar town contains about 870 families or 4,350 persons, and Píshukán about 40 families or 200 persons. majority of these are Méds who number about 3,700 persons. and there are also Koras or sailors 80 families, Hindus 40 families, Khojas or Lotias 50 families. The Arab Wáli, following and escort of sepoys, number about 30. Nigwar Baloch are Zikris; the Khojas are followers of the Agha Khán; the Arabs are Biázis or Khárjis; and the Méds and Koras are Sunni Muhammadans. The Méds and Koras of Gwadar, Pasni and Ormára and some of the Darzádas of the interior belong to the Rifai institution of the Muhammadan school of theosophy. A mention of the Rifái Fakírs found in Bombay has already been made under Population but the Rifáis of the Makrán coast and of the interior differ from them inasmuch as the former are professional beggars, while the latter live by their industry and labour.

At Gwádar, Turbat and Pasni the Rifáis have special places where they convene their meetings at which they sit in two rows facing each other, and in a loud voice repeat the formula la ilah illallah to the accompaniment of hand drums. The chorus is led by the Khalifa or the deputy of the Pir at Bombay. They gradually work themselves up into a condition of the wildest frenzy; and rising up thrust sharp spikes into different parts of their bodies, but such is the state of their excitement that they appear to feel no pain. They also pick up red-hot chains having previously smeared their hands with oil. These meetings are generally held at night.

The founder of the sect was Saiad Ahmad Kabír, a collection of whose theosophical lectures has been made by Abdussami Alhashami, a Persian translation of which by Ahmad Surayya was published in Constantinople.* He was a Hussaini Saiad who lived in the latter half of the twelfth century and died in Kuai Um-é-Obaida in Iráq. The present observances of the Makrán Rifáis appear to be a later development.

The occupation of most of the population is fishing; the Baloch are engaged in flockowning, cultivation and

^{*}Tarjuma-& Alburhán-ul-Muaiad by Ahmad Surayya, (Mahmud) Beg Press, Constantinople, 1302 A. H.

transport business, and the Khojas and Hindus in trade.

Cultivation is confined to Gwadari Nigwar; its extent is insignificant and, as a means of livelihood, it is precarious. Large tracts of cultivable land are, however, available for Agriculture. cultivation. The whole of the land is dry crop and dependent on floods caught by embankments. The cultivators generally combine flockowning with agriculture.

The principal crops are juári, cotton, and másh. A little wheat, barley, parmásh, arsun and some melons and dates are also grown. There are about 600 camels in Nigwar.

The main route from Gwadar to Turbat traverses the south-east of the area. An alternative route leads northward to the Ankarau river and crossing the Dramb joins the first route at the Talar pass. Several tracks lead westward to Persian Makrán, the principal one following the telegraph line via Gabd and Drábol to Báho and another going to the same place via Suntsar and the Dasht.

The country is administered by an Arab deputy of the Sultán of Maskat, known as wáli, who lives in Gwádar and is assisted by an Arab garrison of 20 footmen. A subdeputy, a Méd by origin, lives at Píshukán. Civil cases are referred to a local qási whose decision has to be confirmed by the wali. The interests of the British subjects, i.e., the Hindus and the Khojas, are looked after by a resident Native Assistant to the Director, Persian Gulf Telegraphs, the latter deciding any civil or criminal cases which may occur. The wáli is helped by the Nigwar headman in all cases relating to the people of that place, and by the Kauhdás of the Méds and the Koras in cases relating to the latter. In return for his services, the Nigwar headman is given the dah-yak and grazing tax of Nigwar. The Kauhdás of the Méds and the Koras get 4 dollars per annum as their pay. The only revenue realized by the Maskat authorities is derived from custom duties levied on all goods entering or leaving the port at 5 per cent. ad valorem, from octroi on goods imported into Gwadar Town, and from one-tenth of all fresh fish.

Salt is manufactured in pans from salt water raised to the surface from wells on the shore. It was untaxed until 1903, in which year the Arab authorities proposed to take one-

MINIATURE GAZET-TREES.

Communications.

Administration and revenue arrangements.

Miscellaneous.

twentieth of the produce as revenue. The salt is used for local consumption and fish-curing.

Gwadar Town, which has hitherto been the principal place on the Makrán coast, is an open roadstead and port, standing on a sandy isthmus to the northward of Gwadar head, about 290 miles from Karáchi, in 25°8′ N, and 62°19′ E. On either side of the isthmus are bays, both of which are shallow, and large steamers cannot approach near the shore. A landing has to be effected in country boats. The population numbered about 4,350 persons in 1903, the majority being fishermen, Méds. Most of the dwellings are mat huts, but round a square fort with a high tower garrisoned by the Arab sepoys there are clustered a number of mud and stone houses, among which the Khoja mosque is conspicuous.

The history of Gwádar has been given with that of the surrounding country. It was attacked and burnt by the Portuguese in 1581; and in 1739, Taki Khán, Nádir Sháh's general, captured it. At the end of the same century it fell into the hands of Maskat, the authority of the Sultán being represented in 1903 by a wáli and 20 sepoys.

The value of the trade, which is carried on by Hindus and Khojas, was estimated in 1903 at $5\frac{1}{2}$ lakhs of exports and 2 lakhs of imports. The contract for the customs, octroi, and tithes on fish, was leased for Rs. 40,000 in 1902-03, but since then they have been collected by the Sultan's own establishment. Dues are levied both on imports and exports, generally at 5 per cent. ad valorem, and a tithe is taken of all fresh fish landed in the port.

Formerly Gwádar was the chief port of Makrán and the trade from Persian as well as Kalát Makrán gravitated to it, but since the construction of the bridlepath from Pasni to Turbat and Panjgúr, nearly the whole trade of Makrán has found its way to Pasni, which is fast coming into prominence to the disadvantage of Gwádar.

Gwadar is a fortnightly port of call of the British India Steam Navigation Company's steamers, and contains a combined post and telegraph office, which is located in a building belonging to the Indo-European Telegraph Department on the north-east of the town. Near it is the political bungalow.

The number of large native craft (1905) belonging to the place is 23; the fishing boats number 646.

GAZET-TEERS.

pects and conformation.

Dasht or the valley of the Dasht river is regarded Physical asas the second largest unirrigated tract in Makrán, Kolwa alone being more extensive. It is bounded on the north by the watershed of the Gokprosh hills, on the south by the sea, on the east by the watershed of Jam Gwang, the Drámb hills, and of other parts of the Makrán Coast Range, and on the west by the Perso-Kalát boundary. It thus includes not only the plain country lying in the valley of the Dasht river but Nigwar, or the cultivated skirts of the Gokprosh ridge on its north-west corner, and also the hilly country forming the southern slopes of the Gokprosh hills within which lies Kastag. The coast line, which extends for about 80 miles, is low with rocky points and hills near the sea, the two most conspicuous headlands being Ganz about 454 feet high and Jiwnri about 100 feet high. interior consists of a flat plain bounded by mountains, dotted with low hills, and intersected with numerous hill tor-The northern part is more level and better cultivated than the southern. Through the centre of the plain, the Dasht river, the largest river in Makrán, winds its zigzag course from north-east to south-west. Nigwar contains a good deal of jungle and Jiwnri possesses a small tract of kahúr trees in the dry-crop tract known as Robár. higher end of the plain is not more than 200 feet above sea-level.

The Sáiji portion of the Talár ridge of the Coast Range skirts the Dasht river on the south for many miles and ends in a point overlooking the river at Sunt Sar. The highest peaks are Darwar (3,126 feet), Daligai (2,968 feet), Chati (2,724 feet), and Chappi (2,495 feet). The Pannodi Band, a low ridge separating Nigwar from Dasht proper, runs east and west in the middle of the valley at an elevation of about 900 feet. The Gokprosh range on the north has been described in Chapter I of this volume. The little valley of Kastag within it was in possession of the Chief of Baho in 1903. It contains no permanent habitations, and there are merely a few temporary palm-leaf huts at such places as Paláni Sunt and Kandar occupied by flock-owners.

Hills.

valley includes a plot of land measuring about to acres. The hills forming the cliffs and headlands along the coast consist of jagged ridges of white clay. To the west of and near the mouth of the Dasht river are the isolated hills of Drábol.

Rivers.

Besides the Dasht river, which has been described in Chapter I, the only streams worthy of mention are the Nilag and Daddeh, both tributaries of the Dasht river, rising at the watershed between Dasht and Pidárk and irrigating the dry-crop areas of the same name. The Dasht river, which is said to have been called Kúshmatén in the time of the Arabs, winds its way through the plain, its course being studded with patches of jungle and having large, deep pools at short intervals. The cultivation of the Dasht proper depends entirely on this river. If dammed at favourable spots, the flood water could probably be utilised for irrigation at a good many places. The river is tidal for 12 or 15 miles from its mouth.

Botany and fauna.

The patches of tamarisk along the course of the Dasht river have already been mentioned and kahúr is to be found in areas subject to inundation. Nigwar is better wooded than the rest of the country, especially the area between the Jat and Bal rés. Animal life is scarce in the plain. A few ravine deer are to be seen. Fishing is carried on at Jiwnri and Ganz.

Temperature and rainfall. The climate is hot and oppressive, except in the cold weather when the air is crisp and the nights cold. The rainfall is very scanty and sometimes none occurs for several consecutive years. In Dasht proper water is obtained from large pools in the bed of the Dasht river; in Nigwar from deep wells and in Jiwnri from shallow wells. The water is abundant and good.

History and archæology.

The Dasht and Kéch appear to have always been connected, and the tract has little history distinct from that of Kéch. The tract is said to have been uncultivated and uninhabited, except by graziers, previous to the settlement of the Shéhzádas at Gwádar and subsequently at Jiwnri. Tradition relates that, in consideration of receiving a share in the revenue, the ancestors of the Shéhzádas cut through the Gokprosh range at Gatt, thus bringing the water of the

combined Kéch and Nihing rivers to irrigate the country. Captain Lockwood traversed the whole length of the tract in 1877 and a record of his visit will be found in Sir C. Macgregor's Wanderings in Baluchistán. Kuntdár, a flourishing village in Sar-Dasht, was attacked and looted in December 1900 by Muhammad Umar Khán, the grandson of the notorious Baloch Khan, an affair which led to the expedition of December 1901 and ended in the capture of Nodiz fort.

MINIATURE GAZET-TEERS.

At Sohtagén Dor near Koh Tungi at a place about a quarter of a mile from the Dasht river, some ancient buildings were excavated by Major Mockler* in 1876. clines to think them to be the remains of a temple. liwnri, the same officer noticed about 300 or 400 dambis, some of which he excavated and found fragments of bones, broken pottery and copper bracelets, etc.

The total population of Dasht and Nigwar in 1903 was Population. estimated at about 2,597 families or 12,985 souls. permanent villages number 16, of which Kohak, the head quarters of the Kauhdá of Dasht, Bal, the head quarters of the Kauhdá of Nigwar, Jiwnri and Ganz, the fishing centres, are the chief. In the interior all the villages are situated in the neighbourhood of the Dasht river. bulk of the population consists of Dashtis, the original inhabitants of the soil, Lattis, said to be Kalmatis, Birdis, said to be connected with the Kahéris of Báho, Darzádas, Iats, Sopaks and Bizanjaus, both of Bráhui origin, and servile classes. Other groups inhabiting the country are Shéhzáda, Marwat Afghans by origin, 45 families or 225 persons, the Ghulámsháhzai and its sub-section the Kalérzai, immigrants from the littoral of Omán 30 families or 150 persons, Hots 12 families or 60 persons, Kauhdáis 4 families or 20 persons, Méds of Jiwnri and Ganz 172 families or 860 persons, Rinds and Jadgáls. The religion of the majority is Zikri; the rest are Sunni Musalmans. The occupations of the people are cultivation, flock-owning, fishing and transport. Shops are located at Jiwnri and Ganz, where some of the indigenous products are sent, but Gwadar and Pasni are more popular marts.

Dasht has a great local reputation for its fertility and is Agriculture styled the granary of Kéch. Except between Gabd and

[.] Journal of the Asiatic Society, Vol. IX., Part I, 1876.

Jiwnri, where the soil is saline, the whole of the plain is fairly well cultivated and is noted for its cotton and inári. whole tract only produces rain and flood crops, the water from the surrounding hills being caught by embankments and some cultivation being done from the floods brought down by the Dasht river. Owing to the capricious rainfall, however, agriculture is precarious, though the conditions could probably be improved and cultivation largely extended. The soil is a whitish clay mixed with sand. The cultivable plains are known as pat.

Crops.

The principal crops are juári known locally as sohro, cotton and másh. Among miscellaneous crops may be wheat, barley, parmásh, arsun and melons. mentioned The cultivators supplement their means of livelihood by flock-owning and camel-breeding. One of the features of Dasht is its possession of large numbers of camels which were estimated to number 2,700 in 1903. Every household possesses one or more. The breed of riding camels is specially noted and also its four-horned sheep.

Communications.

Dasht and Nigwar are connected with the surrounding areas by tracts which are easily practicable. The main route traversing the whole length of the country is that from Jiwnri to Turbat via Kuntdár. A branch from the main route between Gwadar and Turbat separates at Biri and leads across Nigwar to Tump. Mand may be reached over the Talidár-é-Kandag. A track from Gwádar runs along the telegraph line to Gabd whence it continues to Báho and Dashtiári in Persia. Another track to Báho goes through Sunt Sar.

Administration and revenue ar-

Dasht proper is administered by the naib of Kech, but Nigwar, Jiwnri and Ganz are administered by the sub-náib of rangements. Tump, as both these places are included in the jurisdiction of the Gichki Sardar of Tump. The Kauhda of Dasht helps in revenue work and holds his lands revenue-free as remuneration for the work, besides receiving Rs. 80 out of the Rs. 1.800 realized from Dasht as Zarr-é-sháh. The minor Kauhdás of each rés also receive a remission of the revenue due on their own lands in payment for their services, this amount being realized from the half share of the Gichkis in the revenue and not from that of the Khan. The Kauhda

of Nigwar only receives a remission of the revenue on his own lands.

MINIATURE GAZET-TEERS.

For revenue purposes, Dasht is divided into two main divisions, Sar Dasht and Jahl Dasht, and the whole tract is divided into the following smaller areas known as rés, each of which is assessed to a fixed amount of zarr-é-sháh in addition to the revenue which is levied in kind at the rate of one-tenth of the produce:—

NAME OF rés.		· Zarr-é-sháh.			NAI	ME OF re	Zarr-é-sháh.			
				Rs.						Rs.
1.	Goraspi, Kui	ntdár,			10.	Langás	i.,,	•••	•••	100
	Patwáni and	I Gajjo		100	11.	Asádi	•••	•••	•••	100
2.	Ballén	•••	•••	100	12.	Zarrén	bug	***	***	100
3.	Sheh rés	•••	•••	100	13.	Miténg		***	•••	100
4.	Kasar and An	nmalár	ıi	100	14.	Sádoi K		.49.0	•••	100
5.	Kunchiti	•••	•••	100	15.		•••	• •••	***	100
6.	Kohak			700	16.	Daméli	•••	***	•••	100
0.		***	***	100	17-	Kaláto	•••	***	•••	100
7.	Daddeh	***	***	100	18.	Gabd	•••			100
8.	Murád and D	árdán	•••	100	1			•		
9.	Bishuli	•••	•••	100	1				, (,800

The sarr-é-sháh, also known locally as sar-é-sarr, realized from Nigwar is Rs. 600 and is distributed as follows:—

Mas	ME OF rés. Zar	· u d .	sháh.	NAI	ME OF rés		Zar	r-é-si	iáh.
1. 2. 3. 4.	Pittok Hot Chát (half rés) Drachko (half rés) Jat (half rés) Mach Chát	•••	Rs. 100 50 50 50	7. 8.	Sheh Zan Táloi and Bal Kahírén Gwahrag	i So	rag	}	Rs. 100 100 50 600

Jiwnri with Ganz is also assessed to Rs. 50 as sarr-é-sháh. A tithe of all fresh fish is taken at these places. Grazing tax is levied at the usual rates. There are no date trees in Dasht; there are a few in Nigwar which are not assessed to revenue. The Gichkis of Kéch take half the revenue of Dasht and the Gichkis of Tump half of that from Nigwar and Jiwnri.

Salt is obtained from three places, Jámu Ták, Sar Hor and Túro. No revenue had been levied up to 1903.

Nigwar is a small dry crop area in the north-west corner of the Dasht valley, and in the possession of the Gichki Sardar of Tump. It is well cultivated and was estimated to

Miscellaneous.

Localities of

possess a population of about 745 families or 3,725 persons in 1903, the chief groups being Kauhdáis, Shéhzádas, Jadgáls, Hálázais and Jats. Nigwar is noted for its production of cotton which flourishes most in a soil known as gach. There are only four permanent villages; Bal, the head quarters of the kauhdá, Shéh Zangi Kalát, Pittok and Mach Chát. The administration is carried on behalf of the Khán by a sub-náib who lives in Tump. In addition to the fixed cash assessment mentioned in the article on Dasht, the land revenue is taken by the appraisement of the standing crops at the rate of one-tenth.

Places of interest.

Jiwnri.—The sea-port of Dasht, about 290 miles from Karáchi, lies on the east side of Gwetter bay and on the west side of Iiwnri head and differs from most other places on the Makrán coast in its being situated on low rocky cliffs. Here are two hamlets, half a mile apart, while a third lies on Jiwnri head itself. The number of houses in these three hamlets in 1903 was 90 and the population in 1903 numbered about 450 persons. All of them are Méds (fishermen) connected with the great Rais tribe of Makran which has been described in the section on Population. Twelve families of Shéhzádas, to whom reference has also been made in the same section, lived in the place, but have migrated since 1903 to Píshukán. A single shop in 1903 was kept by a Khoja shop-keeper. The hamlets are composed of dwarf palm huts, and there is no harbour. Boats anchor in the open roadstead. The supply of drinking water is obtained from shallow wells and is good.

To the north-east of Jiwnri head are many stone graves adorned with floral designs similar to those found in Las Béla. Locally they are assigned to the time of Ráis Jámu, the ancestor of the Méds now living at Jiwnri.

A munshi, one daffadar and two footmen were posted at Jiwnri in 1903. In December 1902 the combined customs of Jiwnri and Ganz were leased for sixteen months to a Khoja of Gwadar for Rs. 610. Owing to the diversion of most of the trade in the interior from Gwadar to ports in Kalat territory, the lease rose in 1904 to Rs. 15,500 for two years. Trade from Tump, Mand, Nigwar and Dasht generally comes to the port. Duties are levied at 5 per cent. ad valorem on

imports and exports, besides tithes on the fresh fish landed. In 1903 the number of boats only amounted to 25, of which 10 were for deep sea fishing and 15 for fishing near land.

MINIATURE GAZET-TEERS.

Ganz, which has been founded by people from Jiwnri, possessed 82 mat huts and a population of about 410 in 1903. The people are Méds of Ráis extraction. In 1903 there were 8 large fishing boats, and 10 smaller ones. A small white-washed mosque is the only permanent building.

Physical aspects and conforma-

Kech Valley.—The term Kéch is applied in its widest sense not only to the great central valley of Makrán, comprising Mand, Tump, Kéch proper, i.e., the country round Turbat, and the basin of Kolwa, but to various localities lying to the north and south of the valley including Buléda, Dasht and Kulánch. The last two have been dealt with separately, and this article is, therefore, confined to the Kéch valley between Kolwa and Mand, as above described, and the valley of Buléda. This is the Kéch-Makrán of history, so called to distinguish it from Persian Makrán, the two tracts making up the Makránát. Kéch-Makrán is bounded on the north by the Central Makrán Range, on the east by Kolwai Garr, or the north-eastern portion of Makran Coast Range, on the south by the latter range including the Gokprosh hills, and on the west by the boundary line between Kalát and Persian Makrán. The whole consists of a long narrow valley hemmed in by high ridges, and widening at the extremities. The central portion possesses a large irrigated area, and is better cultivated and more thickly populated than the eastern and western parts where dry crop cultivation is more extensive. Between Mand and the western end of Kolwa, the valley runs due east and west, and here the centre of the valley is intersected by the channels of the Kéch Kaur and the Nihing. Further eastward, the direction is north-east and south-west, the elevation above sea level varies from about 300 feet in Kéch proper to about 1,800 feet in Kolwa. The total length of the valley is about 200 miles. The breadth, at the widest point excluding Buléda, is about 12 miles and at the narrowest about 6.

The ranges by which the valley is enclosed have already been described. The parts of the Central Makrán Range immediately north of the Kéch Valley are the Bulédai Band Hills.

and the Sami Band. Further particulars about these mountains will be found in the section on Physical Aspects.

Rivers.

The principal rivers are the Kéch Kaur with its tributaries the Kíl and Gish Kaurs; and the Nihing with its affluents, the Kulbar and Tagrán. They have been described under **Physical Aspects**. Much of the irrigation of Kéch is derived from them. The Kíl and Gish Kaurs are clothed with patches of tamarisk jungle, especially the Kíl Kaur which is noted for the growth of its tamarisk, from which grain measures, planks, etc. are cut. The Kulbar and Tagrán are well known for the abundance of their pasturage. Kolwa possesses two streams, the Wahli and Doráski, which join the Mashkai river near Awárán. Léngari Drug, which is watered by the overflow of the Wahli, is a well known pasture ground.

Botany and fauna.

Grass and fodder plants are fairly numerous, the barshonk sorag, drug and kándár being among the more important. Next to the date which forms so distinguishing a feature of the landscape, kahúr and tamarisk trees are most common. Srinkin Tad, Násirábád jungle, Lad-é-Apsar and Marrah are the areas most thickly covered with trees. The mountains contain plenty of Sind ibex, and ravine deer are plentiful in Kolwa. Hares are numerous and afford much sport to local huntsmen. Wolves, leopard and bears, known as mam, are met with here and there. A good many wild pig are to be got near Osháp, Bit and Awárán in Kolwa. Wild ducks frequent the pools in the bed of the rivers during winter and a few grey partridges are found in the jungles adjoining cultivation.

Temperature and rainfall.

The climate is exceedingly hot, oppressive and unhealthy during summer, but is pleasant in winter, at which time the mornings and evenings are cool and crisp. The heat in summer is very dry. The rainfall is scanty, and cultivation would be precarious but for the permanent sources of irrigation which are fairly numerous in Tump and Kéch proper.

History and archæology.

The history of Makran is the history of Kech and has been fully given in another place. Half the revenues of Kech were acquired by Nasir Khan I, of Kalat, from the Gichkis in the middle of the eighteenth century, since which time Brahui influence has been gradually extended to all branches of the Administration.

The valley still contains evidence of a far higher state of civilization than that which now prevails, and local tradition asserts that it was once thickly populated. objects of archæological interest may be mentioned the Káúsi. the Khusrawi and Bahmani Kárézes, the Míri fort and the Bahmani damb. At Shahrak the large round stones. resembling those used in mills, have been discovered.

MINIATURE GAZET-TEERS:

From west to east the localities included in Kech are Asp- Population. i-kahn and Mand, Tump, Kéch proper, Sámi with Sháhrak and Bálgattar and Kolwa. With Buléda is included Zámuran and on the south lie Pidark, Pamah and Gwarkop. Wakai is an independent area west of Buléda in possession of the Rinds. The total population in this area is about 7,334 families or 36,670 persons. The number of permanent Gichkis. villages is about 84. Turbat is the head quarters station and the seat of the Administration. Among other important places Bulédai Mirs. may be mentioned Kaush Kalát, the residence of the Gichki Sardár of Kéch, Tump, the head quarters of the sub-náib of Rais-Tump and of the Gichki Sardar of Tump, Chib, the residence of Lundi. the head of the Naushérwánis of Buléda, and Hor, the head Kattawar. quarters of the head of the Nausherwanis of Kolwa and of the sub-náib of Kolwa. The more important tribal groups inhabiting the country are shown in the margin. gion of the majority is Sunni Musalmán; the rest are Zikris. The occupations of the people are cultivation, flock-owning Korak, and transport. The principal mart is Turbat and shops are Bizanjau. also located at every large village throughout the tract.

Naushérwánis. Kauhdái. Kallági Baloch. Sámi Baloch. Rakhsháni. Kolwai. Koh Baloch. Darzáda.

Excluding Mand and Kolwa, nearly the whole of the cul- Agriculture. tivated area is irrigated. The two localities first mentioned contain large dry crop areas, the floods from the surrounding hills being caught by embankments. Owing to the abundant irrigation ensuring permanent cultivation, the narrow strip lying along the Kéch Kaur in the central part of the valley is well protected against famine. Kolwa, too, is highly productive in years of good rainfall.

The soil is a whitish clay mixed with sand; the irrigated land is not so productive as that of the dry crop areas. The Mandi Kaur in Mand is the only stream in which dams are constructed for purposes of irrigation. Both the Kéch and Nihing Kaurs are causing diluvium to the lands at

Sámi, Turbat, Kahúr-é-Kalát and Tump, (1904). There are 100 kárézes and 52 kaurjos, excluding smaller water channels in working order (1904).

Crops.

The principal crops in irrigated lands include the date, wheat, juári and rice. The most important of these is the date, a full account of which has been given in the section on Agriculture. Barley, cotton, arsun, tobacco and sweet potatoes are also grown. The trees in the few gardens are chiefly mangoes, guavas and oranges. Lucerne is grown as a fodder crop, and brinjals, turnips, carrots and pumpkins in small quantities for vegetables. The dry crop area is well known for its large production of wheat and Kolwa for its barley, and these are the only spring crops in these localities, while juári, másh, parmásh and melons constitute the autumn crops.

The cultivators supplement their means of livelihood by flock-owning and camel-breeding, and the whole district is estimated to possess about 2,550 camels. Few of these are to be found in the valleys of the Kéch and Nihing, but Kolwa probably possesses about 1,500 camels which are noted for their size and strength, Mand about 100, Buléda about 600, Pídárk, Jamak and Gwarkop about 50, and Bálgattar about 150. The whole tract is estimated to contain about 1,500 bullocks and 1,400 cows.

Communications.

There are no made roads except the bridle-path from Pasni to Panjgur which crosses the valley for a short distance. The old pilgrim route from India via Las Béla to the west crosses the Jaulak and traverses the whole length of the Kéch valley leading into Persian Makrán via Pishín, Géh and Kasarkand. It is still much frequented. At the north-eastern end of Kolwa it is joined by a track from the Ihalawan country via Mashkai. The main route from Gwadar enters Kéch over the Talar pass and continues onward to Dizzak through Buléda and Zámurán crossing the Kalgar pass. Further east a parallel route leads to the same place from Kéch over the Garruk through Buléda, Zámurán and Bámpusht. The bridle-path connecting Pasni and Turbat continues through Buléda and across the Haft Kandag into Panigur and another track leads to Panigur over the Kátag-é-Kandag and through Bálgattar.

KOLWA.

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The shortest route to Dasht from Turbat lies via Kalátuk over the Gokprosh at Bandgáh-é-koh.

MINIATURE GAZET-TEERS.

tion and revenue arrangements.

The country is administered by a náib whose head quar- Administraters are at Turbat. Mand and Wakai are also politically controlled from it. The revenue is divided equally between the Gichki Sardár of Kéch and the Khán except in Mand, Sámi, Bálgattar, Sháhrak, Pídárk, Buléda and Zámurán and the Naushérwáni. Mírwári and Bízanjau possessions in Kolwa, in none of which is revenue assessed. The income is derived from a cash assessment, known as sarr-é-sháh. a tithe of the produce, a cash assessment on dates at the

					Rs.	a	p.	rate of Rs. 4 and
Kech prop	per	•••	•••	•••	4,768	10	0	Rs. 6-4-0 per
Tump	•••	•••	•••		650	0	0	hundred fruit-
Nigwar	•••	•••	•••	•••	60 0	0	0	bearing trees, and
Kulánch	**1	•••			I,200	0	0	•
Dasht		•••	•••	•••	1,800	0	0	from cattle tax.
Buléda	•••	•••		•••	275	0	0	The total amount
Jamak, G	warko	р, е	etc	•••	280	0	0	of zarr-é-sháh
assessed o	n the	nid	<i>bat</i> is	Rs.	9,573	-10	and	is distributed as
shown in t	he m	argi	n.					

Kolwa formerly formed part of the Jhalawan country and was administered from Mashkai. It was amalgamated with Makrán in 1891. It pays no sarr-é-sháh.

The land revenue is collected by appraisement and is recovered either in cash or kind, whichever is convenient to the cultivator. Cattle tax is realised at the rate of one sheep per flock of fifty and a seer of ghi.

The other sources of revenues are fines, court fees, income from confiscated estates, transit dues introduced in 1900, and the duty on salt obtained from the Kolwa and Bálgattar kaps.

Kolwa is the eastern extremity of the Kech valley and Localities of the largest dry crop area in Makrán. It consists of a long narrow strip of open country running east and west and describing an arc of a circle from Pirándarr to Tank, about 100 miles long and 10 to 15 miles wide. It is entirely enclosed by mountains. The hydrography is peculiar and consists of three separate tracts, the easternmost being drained by the Mashkai and its affluents, the Doráski and Wahli. The other two parts consist of basins of closed drainage.

interest.

that on the east between Gushanag and Chambur is known as Marrah, and is well clothed with vegetation, while that on the west between Chambur and Gumbad is called the Kolwa kap and is absolutely naked.

History.

Kolwa is perhaps the Kalwan of the Arab authors. Mir Chakar, the hero of so many Rind ballads, was born in Ashal-é-Kalat near Rodkan about the fifteenth century, during the time of Rind migration towards Kachhi. In more recent times, it has been the scene of many engagements first between the Naushérwanis and Mirwaris, and secondly between the Naushérwanis and the Bizanjaus, supported by the Kauhdais. These disputes have been referred to in the account of the Makran Naushérwanis in the section on Population. The first resulted in the acquisition by the Naushérwanis of the Mirwari possessions in Kolwa with the exception of Zik and Marrah, though the Mirwaris have since again obtained possession of some parts by purchase; and the second ended in Mir Baloch Khan, Naushérwani, being forced to fly for a time to Kharan.

The population, which was estimated in 1903 at about 479 families or 2,395 persons, is for the most part nomadic. There are only 13 permanent villages, the principal ones being Hor, the head quarters of the Kolwa Naushérwánis, Upper and Lower Málár, Pirándarr and Gushánag, the residence of the Mírwáris; Chambur, the head quarters of the Omrári Bízanjau, and Awárán of the Hammalári Bízanjaus, and Balor which is held by Kauhdáis. There are forts at Hor, Bazdád, Awárán, Pirándarr and Chambur. Bazdád and Awárán are out of repair. The principal groups in the country are those in the marginal table. Kolwa is famous

Naushérwanis.
Mírwáris.
Kauhdáis.
Omrári and other
Bízanjaus.
Sangurs.
Kolwais.
Koraks.

for its production of barley and the size of its camels. Cultivation is done on the dry crop system, except in the case of a few patches of irrigated area at Nág, Hor, Málár, Awárán, and Kásimijo. From the numerous ruins of ancient káréses,

which are still to be seen, it appears that Kolwa was once well irrigated and enjoyed great agricultural prosperity. A good many cattle and buffaloes are kept on the fine grazing

grounds at Marrah and along the banks of the Wahli, and sheep and goats are plentiful.

MINIATURE GAZET-TEERS.

tions.

Good tracks traverse the length of the valley both on Communicathe north and south, the former, however, being most used. Panigur can be reached either via the Doráski or via the Mádag pass; Ormára via Balur and the Basol river; and Béla via Nondaro and Jau.

Kolwa is administered by a sub-náib living at Hor. maintains peace and order, disposes of petty cases, and collects revenue from the Koraks, Sangurs, Bizanjaus, Kolwais, and Kauhdais, who are the Khan's subjects. Regular administrative methods are, however, wholly absent. Shops are located at Rodkán, Málár, Gushánag and Awárán, the last having four in 1903.

Kech proper is the narrow tract of country between Sámi and Násirábád lying on both sides of the Kéch Kaur and including both these localities. To this may also be added Pídárk and Bálgattar. Pídárk is in possession of Mír Kamál Khán, son of Mír Fakír Muhammad, Bízanjau, the Khán's former náib of Kéch, and Sámi belongs to K. B. Muhammad Hasan, one of the Panigur Gichkis. former was acquired by purchase, and the latter in blood compensation of Már (Mán) Singh, one of the ancestors of the Gichkis. Bálgattar is a dry crop area attached to Sámi, where a little cultivation and much flockowning is carried on. Kéch is regarded as the heart of Makrán and typical Makráni Baluchi is spoken in it.

The population, which is settled, was estimated at about 3,048 families in 1903 or 15,230 persons. The number of permanent villages is 42, the principal ones being Turbat, the head quarters of the administration, Kaush Kalát, the residence of the Gichki Sardár of Kéch, Kalátuk also held by the Gichkis of Kéch, Násirábád, a fort which is garrisoned by the administration, Shahrak and Sámi.

Gichki. The tribes inhabiting the country Rais. are shown in the margin. Nearly Hot. the whole of the cultivation is Lundi. done bv irrigation which Kattawar. on kárezes and kaurjos. Sangur. The feature of the locality is its Gorhi. date groves, a full account of Darzàda. which has been given elsewhere.

Miniature Gazetteers. The country is administered by the násim personally during three-quarters of the year; during the summer he is represented by a náib, while he himself is absent in Panjgúr. Turbat possesses about eight shops and nearly every village of importance has one or two.

Tump occupies the basin of the Nihing river, and is the narrow strip of country between Bali Chah on the east and Dokop on the west, the latter place lying roughly midway between Tump village and Gawak in Mand. The valley here is about 12 miles wide and contains a narrow belt of cultivation, nearly all of which is occupied by dates.

Though an integral part of Kéch, Tump is in the jurisdiction of the Gichki Sardár of Tump and includes for this purpose Nigwar and Jiwnri in Dasht. The Sardár is a Kéch Gichki, to whose ancestor, Shéh Muhammad, Tump was allotted by Mir Nasír Khán I. The revenue is divided between the Sardár and the Khán, the latter being represented by a sub-náib who lives in the fort at Tump.

The total population, which is nearly all settled, amounts to about 1,540 families or 7,700 persons. The number of permanent villages is 13, the principal ones being Tump, Pulábád, Nizrábád and Kohad. The chief groups inhabiting the district are Gichkis, Rinds, Hots, Rais and Darzádas. The locality is a flourishing one and well irrigated. The sub-náib exercises political control in Mand and Aspi-Kahn as well as in Tump. Shops are common in all large villages and a good deal of trade is carried on with Pasni.

Mand is the westernmost extremity of the Kéch valley. The general appearance of the locality, which is about 20 miles long by 9 wide, is pleasant and prosperous, and well wooded. Irrigation is obtained from three káréses and one kaurjo and much dry crop cultivation exists. Flood irrigation is obtained from dams in the Mandi Kaur. Mand is famous for its production of wheat. The water is so near the surface that dates flourish even in unirrigated land. There is also abundance of pasturage.

The population numbers about 760 families or 3,800 persons (1903), the principal groups consisting of Rinds, who predominate, Rais, Darzádas and servile classes. The number of permanent villages is 7, Gawak, Gaiáb, Soro

and Mítáp being the principal ones. The Rinds, as a tribe, are Sunni Musalmáns, and Mand is the only locality in Makrán where no Zikris are to be found. The Rinds have long been notorious for their turbulence and predatory habits, but the lessons of Gokprosh and Nodiz have not been lost upon them. They pay no revenue for their land in Mand. Those who own lands in Tump and Dasht, however, pay one-tenth as revenue and sarr-é-sháh also. The sub-náib of Tump exercises political control in Mand, but the important cases are dealt with by the násim personally. Shops are located at Gawak and Gaiáb.

MINIATURE GAZET-TEERS.

Buleda is a small valley situated to the north of Kéch within the two arms of the Central Makrán Range, the Bulédai or Kéch Band being on the south and the Zámurán hills on the north. It is a picturesque little valley with the Gish-Kaur running through it, expanding here and there into large pools, from which water for irrigation is taken in artificial channels, one of which, the Jawán Mardán, resembles a small canal. It is famous for the abundance of its pasturage, and possesses a fairly extensive irrigated area and a good many date groves.

Buléda is said to have been the home of the Bulédai dynasty, about which some information has been given in the section on **History.** There are many *dambis* or cairns on the banks of a hill torrent called the Dambáni Kaur.

The estimated total population of the valley, including Wakái and Zámurán, is about 1,139 Naushérwáni, families or 5,695 persons, the princi-Buledai Mir. Rind. pal groups being those shown in the Tajozai, margin. The number of permanent vil-Shambezai, lages is six, the principal among which Sangur, are Sulo, Chib, Bit and Koshk. Barr. inhabitants are Sunni Mussalmáns and Rakhshani and Koh Baloch. Zikris.

The only revenue received by the Khán of Kalát is that of the village of Koshk. The village of Bit belongs to the Naushérwáni Chief of Kolwa, and the rest of the valley, except Wakái, to the Naushérwáni Chief of Buléda, who levies revenue and other dues. Zámurán also owes allegiance to him, but does not pay revenue. Wakái is held by about

30 families of Rinds, who also take revenue and grazing tax in the Dashtuk part of Zámurán. The Khán's názim exercises political control both over Buléda and Zámurán, and takes cognizance of criminal cases. Bit fort is garrisoned by levies under a jemadár who also exercises the powers of a sub-náib. Bit has played a large part in recent local history; and the dispute regarding its possession between Mír Baloch Khán, Naushérwáni, and Mír Azím Khán, Bulédai, was one of the causes of the rising of 1897, details of which will be found in the section on History. The only shops in the tract are located in the Bit fort.

Places of interest.

Turbat, the chief village in Kéch and the head quarters of the local administration, is situated on the left bank of the Kéch Kaur in Kéch proper. The existence of the Khusravi. Káúsi and Bahmani kárézes in the neighbourhood appears to indicate that the site is a very ancient one. The number of houses is about 532 and the population about 2,660 persons (1903). A few Gichkis reside in the place, the rest being Rais and Darzádas. The Rais are large proprietors in the vicinity and very influential. The houses are mostly mat huts, but in 1903 houses were being built with sun The place possesses a strong fort, and, baked bricks. among the edifices, the násim's mosque is conspicuous. The traditions of the Zikri faith cluster round Turbat and the surrounding country. Places which are sacred to the sect include the Shírín Do Kurm stream, Koh-é-Murád or the Zikri Mecca, the seven kahúr trees or Barr-é-Kahúr, the Zamzam well in front of the Turbat fort which has now been filled in. and the caves of the Zikri anchorites near Shirin Do Kurm and Turbat. In 1903, Turbat possessed eight shops.

Physical aspects and conformation.

Panjgur Valley.—Panjgur is one of the two main divisions into which Kalát Makrán is divided, the name being applied in its widest sense not only to the great northern valley which is drained by the Rakhshán river and comprises Rakhshán, Panjgur proper, i.e., the country round Isai, and the catchment area of the Rakhshán river further west, but also to various localities lying to the south, such as Rághai, Gichk, Dasht-é-Shahbánz, Kohbun and Parom. The counterpart of Panjgur on the east is the great basin of the Mashkél on the west, stretching through Dizzak and Sib to Magas.



TURBAT FORT.

Panigur thus defined is bounded on the north by the Siáhán mountains, on the east by the Jhalawán country, on the south by the Central Makran Range, and on the west by the boundary line between Kalát and Persian Makrán. whole tract consists of long narrow valleys, hemmed in by high ridges, but widening here and there. The centre possesses a considerable irrigated area, and is well cultivated and thickly populated. The eastern and western parts consist of stony hill slopes and land which is only fit for dry crop cultivation. The main valley on the north runs southwest between Shíréza and Isai; westward of Isai, to the boundary line, the strike is first due west and then to the north. Rághai, Gichk and Parom form a parallel line on the south. Streams intersect the centre of each of the valleys except Parom which is an area of closed drainage. The elevation above sea level varies from about 3,000 feet in Panigur proper to between 4,000 and 5,000 feet in Rakhshan. The total length of the main valley is about 152 miles; the breadth at the widest point is about 20 miles and at the narrowest about 10.

MINIATURE GAZET-TEERS.

The ranges by which the valley is enclosed have already Hills. been named. On the north the Siahan Range stretches from end to end of the tract with its Sabz-Koh offshoot in the immediate north of Panigur proper. The Zangi Lak continuation of the Bampusht range separates the basin of the Rakhshan from the valleys of Raghai, Gichk, and Gwargo streams, while on the south the Zamuran stretches towards and eventually merges in the Koh-é-Patandar. Particulars about all these mountains will be found in the section on Physical Aspects.

The tract is drained by two separate systems, the principal Rivers. rivers being the Rakhshan with its tributaries, the Gwargo. the Jawan Gazz, and the Askan, the Tank with its affluents, the Gichk and Rághai. All of them have been described in the section on Physical Aspects. Nearly the whole of the irrigation of Panjgur proper is derived from the Rakhshan. The only other running stream is the Tank. Parom contains a large swamp (kap) from which salt is obtained.

Grass and fodder plants are fairly numerous, the barshonk, Botany and sorag, drug and kandar being among the most important.

fauna.

MINIATURE GAZET-TEBRS. It was found, however, that the animals accompanying the troops which were stationed at Panjgur in 1891 soon ate up most of the available wild fodder. Next to the date, which forms so characteristic a feature of the landscape, kahur and tamarisk trees are most common. Khan-é-Kahurdan in Parom, Dasht-é-Shahbanz and Gichk are the best wooded parts in Panjgur.

The mountains contain plenty of Sind ibex and ravine deer are plentiful. Hares are numerous and afford much sport to local huntsmen. Wolves, leopards and a few bears are met occasionally. A good many wild pig are to be got at Dabbag, west of Isai. Wild ducks frequent the pools in the bed of the rivers during winter, and a few bustard are found in the jungles adjoining cultivation.

Temperature and rainfall.

The climate is temperate for the greater part of the year, but the heat from June to September is dry and oppressive, and at this time the conditions are unhealthy. In winter the cold is great owing to the prevalence of the gorich wind. The rainfall is scanty but larger than that of Kéch. Cultivation would be precarious but for the permanent sources of irrigation in Panjgur proper. Fever is very prevalent during the summer months and few escape its attacks.

History and archæology.

Panigur is perhaps identical with the Kanazbun of the Arab geographers. It appears to have always formed part of Kéch and its history is closely connected with that of the last named locality. In later times the name of the district is said to have been Khuramábád from its chief town, the site of which is still shown near Kuhna Kalát, or the 'old fort', about 11 miles north-west of Bunistán. Khuramábád is alleged to have been very populous and to have possessed numerous fruit gardens. Malik Mirza, the last of the Maliks of Makrán, who is mentioned in the section on History, is said to have been killed in Kuhna Kalát by the Bulédais about the beginning of the seventeenth century. Panigur is also famous for the rise of the Gichkis who take their name from the Gichk valley; their subsequent occupation of Kéch and their ultimate subjugation by the Kháns of Kalat have been fully detailed in the sections on History and Population.

Among objects of archæological interest may be men-

tioned Kuhna Kalát, in the construction of which large baked red bricks have been used, and which is said to have been destroyed by the Persians; the tomb of Malik Asa and others which are constructed of glazed bricks with rough figures of men and animals upon them, and the ancient dam of Band-é-gillar.

MINIATURE GAZET-TEERS.

The localities included in Panigur have already been Population. detailed. Rakhshán and Rághai are not included in Panjgur for purposes of administration, but are in possession and under the control of the Naushérwáni Chief of Khárán.

The population of the whole area including Rakhshan and Rághai was estimated in 1903 at Gichki. Naushérwáni. about 3,356 families or 16,780 persons. Tolag Gichki. The number of permanent villages is Kénagizai. about sixteen. Isai is the head quarters Mullázai. station and the seat of the local adminis-Amírári Raís. tration, and Chitkan of the Assistant Barr. Kasháni. Political Agent and the Makrán Levy Rakhsháni. Other important villages are Corps. Shambézai. Sordo, the residence of the Gichki Sar-Saidi. dár of Panigúr and Khudábádán, a popu-Gurgnári. lous village in possession of the Khárán Chákrári. Chief. The more important Nakib. groups inhabiting the country are shown in the margin. Most of the people are Sunni Musalmáns; the rest are Their occupations are cultivation, flockowning and transport. The principal mart is Isai, but shops are also located at all the larger villages throughout the tract.

The centre of the area, i.e., the whole of Panigur proper, Agriculture. is well irrigated and well cultivated. The remaining localities contain large dry crop areas, the floods from the surrounding hills being caught by embankments. The scarcity of cultivation, however, is a feature of Rakhshan, the stony dámán reaching up to the banks of the river. The dry crop areas are highly productive in years of good rainfall.

The soil is a whitish clay mixed with sand; the irrigated land is neither so good nor so productive as that of the dry crop areas. There were twenty-seven karéses and sixty-six kaurjos in working order in 1904.

The principal product is the date and the chief crops are Crops.

MINIATURE GAZET-TEERS. wheat, judri and rice. A full account of the date has been given in the section on Agriculture. Panjgur humbs filled with dates are famous for their quality. Barley, arsun, tobacco, nigins, and beans are also grown. The trees in the few gardens are chiefly grapes, pomegranates and oranges. Lucerne is grown as a fodder crop, and brinjals, turnips, carrots and pumpkins in small quantities as vegetables. The dry crop area is well-known for its large production of wheat, but in the date producing tracts the cereals are much damaged by the shade. Barley and rice are grown in the irrigated lands. Wheat and barley are the spring crops, while juári, rice and melons constitute the autumn harvest.

The cultivators supplement their means of livelihood by flockowning and camel breeding; the whole tract is estimated to possess about 1,000 camels. Few of these are to be found in Panjgur proper; the places where they are most numerous include the Central Makran range; Sorwan, where there are about 150, Barsoli, Rohtak and Shep possessing about 150, Rakhshan having about 100, and Gichk possessing about 70. There were estimated to be about 544 bullocks and 475 cows in the whole area in 1904.

Communications. The only made road is the bridlepath from Panjgur to Pasni. The Kalát-Panjgur route either through the Rághai or the Rakhshán valleys traverses the whole length of the tract. It forms an important artery leading from Baluchistán into Persian Makrán via Dizzak, Sib and Magas. At Bampur it eventually converges on the other great line of communication in Makrán, i.e., the Kéch valley route. The Gichki-Panjgur route via Mashkai enters the Gichk valley through the Tank river and crosses the Garr pass into Isai. A second route from Pasni enters the country via Bálgattar and Gorán-é-Kandag. Several routes lead northward to Máshkél and north-eastward to Khárán.

Administration and revenue arrangements. For three-quarters of the year the country, excluding Rakhshán, Rághai and Khudábádán, which belong to the Khárán Chief and are administered by his representatives, is administered by a náib whose head quarters are at Isai. All the localities included in Panjgúr are administered by the náib. The revenue is divided equally between the Gichki Sardár of Panjgúr and the Khán except in Gichk which

belongs exclusively to the former and his collaterals. Political control is, however, exercised in Gichk by the náib and cognizance is taken of serious criminal cases. sources of income are zarr-é-sháh, a tithe of the produce, a cash assessment on dates at the rate of Rs. 4 and Rs. 6-4 per hundred fruit-bearing trees, and cattle tax; the total

MINIATURE GAZET-TEERS.

Rs. Isai ... 500 Tasp ... 500 Garmkan ... Sari-Kauran 524 Washbod, etc. Kallag ... IOO Khudábádán ... 376

amount of garr-é-sháh assessed on the niábat is Rs. 2,000. It is distributed as shown in the margin, but the full amount is never realized. In 1884 Khudábádán was found by a Jirga to belong to the Khárán Chief, and the total amount of zarr-é-sháh now due to the Gichkis and the Khán is Rs. 1.624.

The land revenue is collected by appraisement, the proceeds being recovered either in cash or kind, whichever is convenient to the cultivator. Cattle tax is realized at the rate of one sheep per flock of fifty and a seer of ghi.

The other sources of revenue are fines, court-fees, octroi, and the duty on salt obtained from the Parom kap.

Panjgur proper is the narrow tract of country between Localities of Saraduk and Kallag, lying on either side of the Rakhshan Kaur and including both these localities. As locally understood, it also includes Dasht, Dasht-é-Shahbanz, or more commonly Sháhbánz, Kohbun and also the whole basin of the Gwargo, as the kauhdas and cultivators of these tracts live in Bunistán and the surrounding villages.

interest. Panjgúr proper with Shahbánz and Kohbun.

The settled population of Panjgur proper, excluding Shah-

Gichki. Naushérwáni. Tolag Gichki. Kénagizai. Muliázai. Rais. Amirari. Barr. Kasháni. Nakíh.

bánz, was estimated at about 2,575 families in 1903 or 12,875 persons. number of permanent villages is thirteen, the principal ones being Isai (population circa 2,660), the head quarters of the administration, Tasp (population circa 2,545), Sordo (population circa 530), the residence of the Gichki Sardár of Panjgúr, Khudábádán (population circa 2,930), Garmkán (population circa 1,590), and

Washbod (population circa 1,005). The groups inhabiting the country are shown in the margin.

Miniature Gazetteers. Most of the houses are built of mud owing to the great cold that prevails here during winter, and in this respect the locality differs from Kéch. Nearly the whole of the cultivation is done by irrigation which is drawn from káréses and kaurjos, and by which the date groves forming the principal feature of the locality are watered.

Chitkan is the head quarters of the Makran Levy Corps. At Isai is a fort garrisoned by the násim's levies, while Khudábádán also possesses a strong fort garrisoned by men from Kharan. Isai contains about four shops.

Dasht-é-Sháhbánz is alleged to derive its name from the fact that it was once the temporary residence of the famous saint of Sehwán in Sind, Lal Sháhbáz. With Kohbun it occupies the basin of the Gwárgo river, which is entirely a dry crop tract. The country is quite open and flat. Sháhbánz is the property of the Kashánis originally Sháhwáni Bráhuis; it was presented to them by the Gichki Sardár. Kohbun belongs to the Barrs, who are said to be of Arab extraction. The Kasháni kauhda possesses a fort in Sháhbánz and the Barr kauhda at Kohbun; neither of them has any garrison. The halting place in this valley on the track from Turbat to Isai viâ Bálgattar is at Sháhbánz-ai-Kalát. The population of both localities is nomad, and in 1903 was estimated at about 200 families or 1,000 persons. They own large flocks.

Rakhshán is the eastern extremity of the northern valley in Panjgúr and the largest dry crop area in northern Makrán. It consists of a long narrow strip of open country running east and west between mountains and describing an arc of a circle from Shíréza to Kénagi Cháh about 85 miles long and 10 to 15 miles wide. In the centre the bed of the Rakhshán river winds its way. It is asserted by the Panjgúr Gichkis that the whole valley once belonged to them, and that the boundary ran up to Panjgúr Koh, a small hillock about a mile west of Nág-ai-Kalát, but they lost it to the chiefs of Khárán during the troublous times which marked the period of Gichki rule in Makrán. Even now the exact position of the boundary in the neighbourhood of Kénagi Cháh is disputed.

Rakhshan has given its name to the Rakhshanis, a branch of the Rékis inhabiting Khárán, Hajizais. Nasroi. and it is remarkable that in sanads grant-Sopak. ed by Nádir Sháh and Ahmad Sháh to Bullozai. the Naushérwáni chiefs, the latter are Muhammad Hasstyled Rakhshanis, suggesting that the nis. nucleus of the Naushérwánis may have Kandúzai. sprung from the Rakhshan valley. The population of the tract which was estimated in 1903 at about 214 families, or 1,070 persons, is for the most part nomadic. There are only two permanent villages, Nág-ai-Kalát and Shíréza, both of which possess forts. The principal groups in the country are those given in the marginal table.

MINIATURE GAZET-TEERS.

Except for a few patches of irrigation at Shíréza and Nágai-Kalát, the cultivation is dry crop.

Rakhshán is sparsely clothed with vegetation and presents a dreary uninviting aspect. Owing to the absence of shelter, the cold winds of winter are much dreaded by the inhabitants who take their flocks to the shelter of the hill torrents and ravines where grazing is plentiful. Many of them migrate altogether either to Khárán or Rághai.

For administrative purposes the Kharan Chief has located

Munshi. Sepoys. two naibs in Rakhshan,
Shiréza ... I 7 one at Shiréza who administers the north-eastKénagi Cháh ... I 7
There was also a havildar at Nág-aiKalát.

Kalát who administers the southern end. The revenue consists of land revenue which varies from one-sixth to one-tenth, sung or transit dues which are levied at the rate of 4 annas and 2 annas per camel or donkey load respectively on all commodities except local wool and ght which are taxed at Rs. 10 and Rs. 8 per camel load. Another source of revenue income is the cattle tax consisting of one sheep, 2 seers of ghi and one felt (tappur) per flock levied twice a year. Thánas are located at Shiréza, Nág-ai-Kalát and Kénagi Cháh. In 1903, the garrisons of each of these thánas was as shown in the margin. There are retail shops at the first two places.

Raghal is a small narrow strip of country enclosed by

MINIATURE GAZET-TEERS. high mountains, in the centre of which the Rághai river In 1903 the settled population only consisted of seven families of Chákráris, who style themselves Rinds and assert they were the original owners of the valley. The tribes living in Rakhshán visit Rághai, however, in winter. Nearly the whole of the tract is stony and arid, but there is a small patch of irrigated cultivation at Pizg, and a few dry crop fields made by embankments for catching the flood water from the hills are to be seen here and there. Though famous for its grazing, the people of Raghai possess no flocks of their own, but it is visited by flock-owners from Rakhshan and Mashkai. Caravans from Sarawán and Ihalawán generally adopt the Rághai valley route in preference to that through Rakhshán in winter, as it is warmer and possesses a better supply of water, grazing and fuel.

Like Rakhshán, the valley belongs to the Khárán Chief who has placed two thánas in it, one at Pizg and the other at Tank west. The garrison of Pizg consisted of one munshi, one naik and fifteen sepoys, total seventeen men, in 1903; that of Tank west was one munshi, one naik and thirteen sepoys, total fifteen men. The sources of revenue are the same as in Rakhshán; for purposes of administration it is included in the jurisdiction of the náib.of Nág-ai-Kalát.

Gichk, i.e., the valley of the Gichk river, is the western counterpart of the Rághai valley. It is bounded on the north by the Zangi Lak Range and on the south by the portion of the Central Makrán Range known as Zung or Gwani Koh. According to the Gichkis the eastern boundary is the Murgapi Kaur, but the Naushérwánis lay claim to the country up to Sáka Kalát. The watershed of Kork or the Gichki Sargwaz lies between Gichk and the Gwargo valley. The slope of the valley is from north-west to south-east, and the whole of it is fairly covered with tree growth, giving it a wooded appearance in comparison with other valleys in this part of the country.

Gichk belongs exclusively to the Gichkis of Panjgur and is famous as the place of their first settlement, whence they gradually rose to supreme power in Makran. At the settle-

ment made by the Gichkis with Mir Nasir Khan I, Gichk MINIATURE was not included among those localities of which the revenue was to be divided.

GAZET.

The permanent population of the valley in 1903 was about 40 families or 200 persons, the groups Bánsar. inhabiting it being noted in the margin. Miázai. The Garruki consist of outcasts from Uwwazai.

other tribes. The cultivation is dry crop. Amírári. except round Sáka Kalát, where there Garruki. are two kárézes irrigating a few fields

and a date grove, all of which are the property of the Saidi headman of Grésha in Ihalawan. Wheat, surrat and sohro are the only crops grown. From the vestiges which remain of many ruined káréses, it is evident that the local belief that Gichk was a well irrigated area is well founded. It possesses good grazing, and is much frequented by nomads from all parts.

The Gichkis of Panigur have a náib at Sáka Kalát, locally called Khan, the only inhabited village, and levy revenue at one-seventh of the produce on dry crop land and at one-tenth on the irrigated cultivation. Grazing tax is levied at one sheep and 21 seers of ghi per flock annually, and transit dues are taken in the case of wool at Rs. 1-4 per camel load and Rs. 2 per 41 maunds standard of ghi.

Parom lies in the south-western corner of Panjgur to the south-west of Panigur proper. An extension of the Bampusht hills bounds it on the north and the Central Makran Range on the west. The edge of the Gwargo valley marks the boundary on the east and the Sham-ai-sar, the watershed between the Parom kap and the source of the Nihing river separates it from Persian Makran on the west. The whole of Parom forms a basin, in the centre of which lies a flat low-lying tract known as kab which receives all the surface drainage. A thick crust of salt forms in it after the water has evapor-The total length of the valley is about 48 miles and the breadth about 10. It consists of an alluvial expanse. which is dry crop, cultivation being confined to the skirts of The valley is very famous for the mountains on both sides. pasture and possesses a fair amount of trees in places. It is believed to receive more rain than any other part of

MINIATURE GAZET-TEERS. Makrán. As the local proverb has it: "Parom can do without rain, but the rain cannot do without Parom." The whole population is nomadic, the total number of families in 1903 being about 100, or 500 persons. The principal

groups are noted in the margin.

The country is administered by the náib of Panjgur and the revenue is received in moieties by the Khán and the Gichkis. One-tenth of the produce is taken as land revenue, and cattle tax and a duty on salt are also levied. There are two little forts, one of which belongs to Kauhda Kamálán, Shambézai, and the other called Ghulám Rasúl-ai-Kalát, to Kauhda Ghulám Rasúl, Sanjarzai. In 1903, an experimental well had been excavated by Kauhda Kamálán, Shambézai, the principal headman, to be worked with bullocks, and trial wells had been sunk from a kárés which gave good promise.

Places of interest.

Isai, the chief village in Panjgur and the head quarters of the local administration, is situated on the left bank of the Rakhshán river in Panjgur proper. It is a comparatively new village, Kuhna Kalát having been the old site. The number of houses is about 532 and the population about 2,660 persons (1903). A single Gichki family resides in the place, the rest being Kénagizais, Barrs, Kashánis and Nakibs. The Kénagizais are large proprietors of the land in the vicinity and have much influence. The houses are mostly mud built. The place possesses a fort, several small mosques and four shops.

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MAKRÁN GAZETTEER. APPENDICES.

APPENDIX I.

Principal Gensus Statistics of Makrán according to a rough enumeration made in 1903.

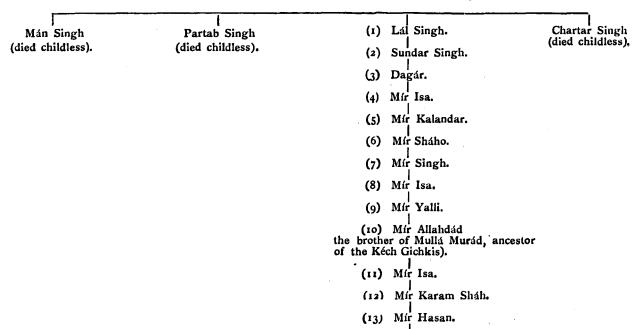
		NAME OF SU	B-DIVISION.		N. 6	TOTAL I	POPULATION LOCALITY.	OF BACH		
Nan Divi	ne of ision.	Niábat.	Sub-niábat.	Name of Principal Localities.	No. of Permanent Villages.	Estimated No. of Houses.	Estimated No. of Nomadic Families.	Estimated 'Total • Population.	Name of Principal Groups.	
	1	2	3	4	5	6	7	8	9	
To	tal.				125	9,395	6,244	78,585		
Kéet	ı	Kéch		Turbat, Júsak and Apsar Kaush-Kalát		50 0 9 7 9	***	2,500 4,895	Gichki, Raís and Darzáda. Gichki, Lundi, Kattawar, Raís and Darzáda.	
				Kalátuk	10	854		4,270	Gichki, Raís, Bízanjau, Gá- jízai and Darzáda.	
		1		Násirábád	5	276	•••	1,380	Gichki, Gorhi, Guzáni, Ko- sag and Darzáda.	
		l	Tump	Tump proper	13	1,540	. •••	7,700	Gichki, Rind, Hot, Raís, Kosag and Darzáda.	
		:		Nigwar	4		745	1	Kauhdái, Jadgál, Hálázai, Shehzáda and Darzáda.	
				Jíwnri Ganz Mand and Aspi-Kahn	I	90 82	 780	410	Méd-Raís. Do. Rind, Raís and Darzáda.	
		Kéch .	•••	Dasht Valley	1	•••	1,680	8,400	Líárzai, Kalérzai, Rind, Hot, Shehzáda, Birdi, Dashti, Gájízai and Dar- záda.	
			Pasni	. Kulánch Valley, Pasni Kalmat, Kappar and Bahri Garr.		670	730	7,600		

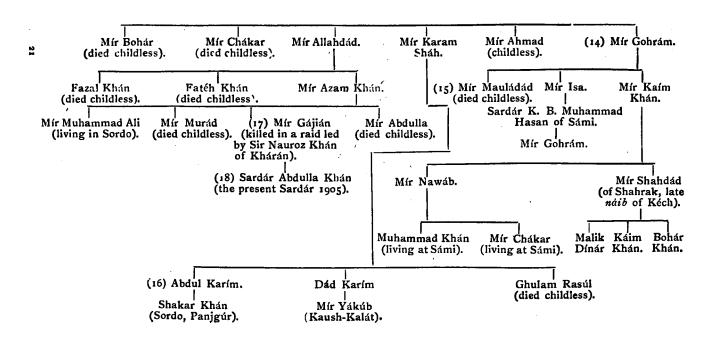
	ļ	Kolwa.	Kolwa Valley	13	•••	479	2,395	Naushérwáni, Mírwári, Bízanjau, Kauhdái, Kolwai, Korak, Sangur, Koh-Baloch, Rakhsháni and Darzáda.
	Kéch	***	Bálgattar, Sámi, and Shahrak, etc.	8	350	87	2,185	Gichki, Kallagi-Baloch, Sá- mi-Baloch, Koh-Baloch, Bízanjau, Sopak, Sájdi, Sangur and Darzáda.
	1		Pídárk, Jamak, Gwar- kop, etc.	3	.150	200	1,750	Gichki, Kauhdái, Bízanjau, Sámi-Baloch, Kosag, Ba- réchi, Bahádurzai and Darzáda.
			Buléda, Wakái and Zámu- rán.	6	558.	581	5,695	Naushérwáni, Rakhsháni, Tájozai, Shambézai, Rind, Bulédai-Mírs, Barr and Darzáda.
			Total (Kech division)	***	•••	***	56,655	
Panjgúr	Panjgúr		Panjgúr proper ·	13	2,575	***	12,875	Gichki, Naushérwáni Kéna- gizai, Barr, Kasháni, Mull- ázai, Tolag-Gichki, Amí- rári, Nakíb, etc.
			Parom, Shahbánz, Koh- bun, Gichk and other small dry crop areas to the west of Isái.	· 1	***	560	2,800	Barr, Kasháni, Gurgnári, Shámbézai, Singozai, Sájdi, Rakhsháni, Nakíb, etc.
			Rághai and Rakhshán	2	•••	221	1,105	Muhammad Hasni, Rakh-
			Total (Panjgúr)		•••		16,780	sháni, Chákrári, Nakíb.
Maskat	Gwádar	•••	Gwádar, Píshukán and Gwádar-i-Nigwar.	2	910	120	5,150	Méds, Koras, Méd-Raís, Mehdízai (Sangur).
	<u> </u>		!					

The incidence per house or family has been estimated at 5..

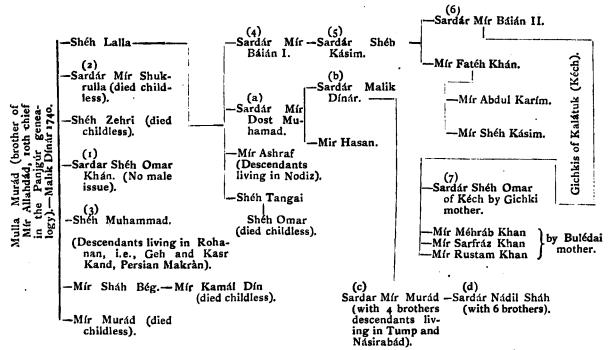
APPENDIX II.

GENEALOGICAL TABLE OF THE GICHKIS OF PANJGÚR



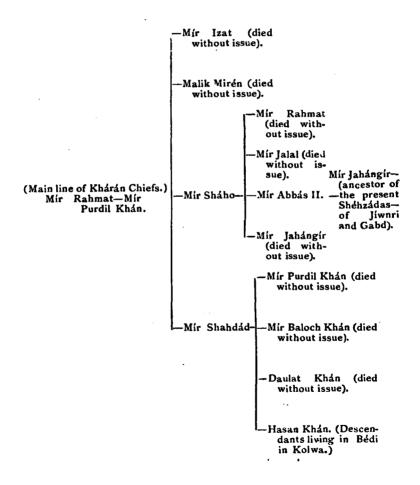


APPENDIX III.
GENEALOGICAL TABLE OF THE GICHKIS OF KÉCH.



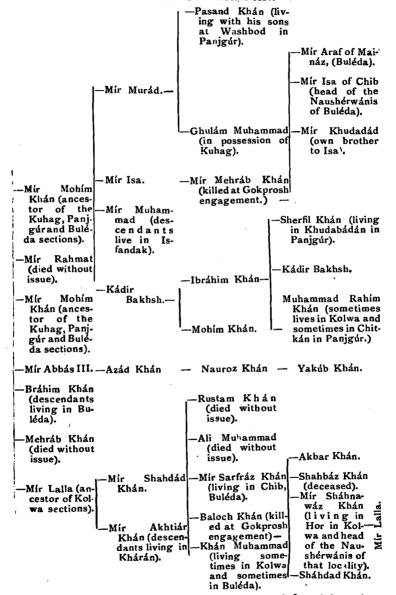
Note.—The figures indicate the order in which the chiefship of Kéch was held and the letters that of the chiefship of Tump.

GENEALOGICAL TREE OF THE NAUSHÉRWÁNIS LIES IN MAKRÁN WITH THE MAIN



Note.—This genealogical tree does not tally with that given in Appendix supplied by the Kharan Chief and is probably the more correct.

SHOWING THE CONNECTION OF DIFFERENT FAMILINE OF THE CHIEFS OF KHARAN.



I of the Kharan Gazetteer. This latter was prepared from information

APPENDIX V.

Statement of the species of date-trees found in Makran.

No.	Name of Date.	Estimate age yield fruit per	of ripe	Estin value avera yield tre	age per	Remarks.
1	Ap-é-dandán (P.)	Mds. First Q		Rs.	a. 8	Fruit about 13" long, colour yellow, circumference 23". Thickest in shape towards the head. Stone thicker than that of other species. Is considered the best of all the Kéch dates when fresh. It is seldom dried.
2	Bégam jangi (P.)	ī	32	4	0	Fruit like that of ap-e-dandan (see No. 1 supra). The best species for drying. It does not deteriorate with preserving and retains its original taste. Fruit 1½" in length and 2½" in circumference.
3	Haléni (P.)	1	8	2	8	Fruit like áp-é-dandán (see No. 1 supra), but shorter, rounder, more stumpy and of equal thickness at both ends. Stone very small and round; a late ripener, pash-pág, i.e., "Latest of all." Fruit 14" in length and 34" in circumference.
4	Chapshuk(P)	1	0	1	8	Colour yellow, easily damaged by rain, size 1" in length and 23" in circumference.
5	Názani or Názané- tabaqi (P.)	I	36	1	12	A very rare date, though a very old species. Is eaten fresh. About forty trees in Kéch and only five in Turbat. Fruit is yellow, thicker and shorter than ap-é-dandan (see No. 1 supra).
6	Kúzanibád.	1	0		4	Scarce. Fruit yellow and like áp-é-dandán (see No. 1 supra), but its skin is thinner and more paper-like than that of áp-é-dandán.

No	Name of Date.	Estimated age yield o fruit per (f ripe	Estim value avera yield tree	e of age per	Remarks
7	Múzáti, Múzáwati and Múzá- pati (P.)	Mds. S First Qu		Rs.	a. 8	Blood coloured. Length about 14" and 34" in circumference, very thick and stumpy. Largely used for preserving in Panj- gúr. In Kéch it is not preserv- ed, but is boiled and dried.
8	Zard-é-k a l - lagi (P.)	o	36	r	0	Scarce. Much like began jangi, but fruit is larger. More easily injured by rain than any other date.
9	Arrisht or Arrarisht (P.)		8	1	4	Fruit similar to sard-é-kallagi (see No. 8 supra) in colour, etc., but somewhat larger. The stone is very long and thin.
10	Sabzo (P.)		36	I	8	This is the <i>ap-e-dandan</i> (see No. 1 supra) of Panjgúr, and eaten fresh like that date. Colour yellowish-green, whence its name. In Kéch there are only two or three trees. Size about 13 ⁴¹ in length and 33 ⁴¹ in circumference.
11	Barr-i-sha- kari.	1 Secon Qualit		I	4	The name is a modern one. A single tree in Kaush-Kalát. Colour and iruit like shakari (see No. 29 below).
12	Dandári (P.)	ī.	0	I .	8	Fruit coloured and like ap-edandan (see No. 1 supra) in shape, but longer and thinner; stone very thin. Is eaten fresh, also skinned and preserved; fetches a good price, but is generally mixed with others before being sold. Size 2½" in length and 2½" in circumference.
13	Rabai (P.)		0	1	8	Can only be distinguished from dandári (see No. 12 supra) by experts. Famous for its juice. Numerous in Panjgúr.

No.	Name of Date.	Estimated age yield o fruit per t	fripe	Estimated value of average yield per tree.		Remarks.
		Mds. Secon	ed	Rs.	a.	
14	Dandári-gon		0	I	0	So called on account of its similarity to dandari (see No. 12 supra). Rather scarce.
15	Gurbago (P.)	0	24	0	8.	Somewhat scarce. Easily injured by rain. Colour yellow. Very tasteful in winter. Size like that of husséni (see No. 63 below).
16	Shinghish kand (P.)	0	36	1	0	Similar to husséni (see No. 63 below) in colour, shape, size, etc., but is better eating. Scarce.
17	Háragi (P.)	0	36	1	0	Like husséni (see No. 63 below). Only numerous in Pídárk. Elsewhere it is scarce.
18	Shehri	. 0	36	1	0	Resembles husséni (see No. 63 below), but is yellowish-white in colour. Numerous only in Panjgúr.
19	Siáh-dap	. 0	36	1	•0	Colour yellow; size like shehri (see No. 18 supra), so called be- cause its mouth is black. Scarce.
20	Míri-é-zard (P.)	0	36	1	0	Similar to dishtari in size (see No. 41 below), but is better eating and fetches a higher price. Scarce.
21	Pánidi or	ı	o	1	0	Do. do.
23	Pánido(P. Míri-é-surki	0	36	1	o	Colour red, otherwise similar to miri-e sard (see No. 20 supra). Scarce.
23	Jowána -bu shams (P.		36	1	0	Similar to miri-é-sard (see No. 20 supra) in colour, size, etc. Scarce.
24	Goari (P.)	0	36	1	0	Colour yellow. Resembles sard-i-kallagi (see No. 8 supra). Scarce, and inferior in taste.

No.	Name of Da	Name of Date. Estimated average fruit per tree. Estimated average gield per tree.		e of rage d per	Remarks,		
			Sec		Rs.	a.	
25	Pono	•••	Qua . I	11EY. 8	. 1	4	Colour yellow, size like goári (see No. 24 supra). Scarce.
26	Bindak		0	36	r	o	Do. do.
27	Pash-pág (Latest all) (P.)		ī	8	I	4	Colour yellow. Like gonsali in size (see No. 55 below). The latest of all dates. Scarce.
28	Irdiki	•	I	8	1	0	Colour yellow. Like gonzali (see No. 55 below) in size. Scarce.
29	Shakari		. I	20	1	8	When ripening red, but when ripe is dark. Size rather smaller than gogná (see No. 82 below) but somewhat longer. Scarce.
30	Kalút	•••	1	8	1	4	Colour yellow and like gogná (see No. 82 below) in size. Good eating. More extensively grown in Panjgúr than in Kéch.
31	Réko (P.)	••	0	36	1	4	Colour yellow, size like bégam- jangi (see No. 2 supra). Is good eating and fetches a good price. Scarce.
32	Nápagi	•••	I	8	1	4	Colour red; size like bégam-jangi (see No 2 supra). Scarce.
33	Khalás		0	24	О	12	A kuroch tree.
34	Shépago (Antimoi stick)	ıy-		36	I	0 .	Colour yellow. About the thickness of the little finger and $1\frac{1}{2}$ in length. So called, because it is as thin as an antimony-stick (shepag). Scarce.
35	Ichko or Gichko.		0	24	0	12	Colour yellow. A very small round, thick date. Scarce.
36	Fard	••	o	24	1	O	Very rare. Colour red. Size and taste like músáti (see No. 7 supra). Is said to have been introduced from Maskat within the last forty years. There is another quality known as fard-é-sard.

No.	Name of Date.	Estimated average yield of ripe fruit per tree.	Estimated value of average yield per tree.	Remarks.
		Mds. Srs. Second Quality.	Rs. a.	
37	Zorábad	o 36	1 0	Like rogini (see No. 42 below). Scarce.
38	Siáh Ganok.	Common or Ordinary Quality.	1 4	One tree in Kaush-Kalát. Colour yellow. Size 2½" in length and 4½" in circumference.
39	Sohrén áp-é- dandán.		1 0	A variety of ap-è-dandan (see No. 1 supra). Similar to that date, but fruit smaller and thinner, and not so tasteful. The colour of the date is a dark-reddish brown.
40	Haléni-gon.	1 0	0 12	Like haléni (see No. 3 supra) as its name signifies, but is a rank growth. Circumference at the lowest point 3½" and length 1½."
41	Dishtári (P.)	1 0	1 0	Colour of fruit yellow. Not quite so long or thick as ap-è-dandan (see No. 1 supra), but the stone is thicker. It was once very famous. The proverb goes "Dishtari dila dari mat wart chuk chari," i.e., Dishtari is so enticing that a mother eats it while she lets her son look on. Size: circumference 2½", length 1½". The name denotes: the bride's tree, as it was the only tree presented as dower in former times.
42	Rogini (P.)	о 36	0. 12	Colour yellow. Somewhat smaller than dishtari (see No. 41 supra), but thicker in proportion. Rare in Panjgur. Size: circumference 23," and length 13.".
43	Rogini Bulé- dai.	o 36	0 12	Smaller than rogini (see No. 42 supra), but darker in colour. Found in Kéch and Panjgúr in smaller numbers than in Buléda. Circumference 21" and length 1".

Na	Name of Date.	Estimate age yield fruit pe	ot ripe	Estimated value of average yield per tree.		Remarks.
		Mds. Comm Ordi Qua	on or nary	Rs.	a.	
44	Shuksh	0	36	o	12	Rare. Fruit round and thicker and bigger than rogini (see No. 42 supra). Reddish in colour.
45	Názan dázi	0	24	o	12	Very like rogini. Is very scarce. Only one or two trees in Turbat.
46	Jowána ja- ntaki.	o	36	I	o	Colour yellow. Similar to rogini (see No. 42 supra) in thickness, but a little longer. Only two trees in Turbat, but numerous in Jamak and Gwarkop.
47	Áp-rogin	0	36	1	0	Colour yellow. Like rogini (see No. 42 supra), but a little thicker and longer. Scarce.
48	Chapshuk kulonti.	0	24	o	12	Colour yellow; in size like rogini (see No. 42 supra), very liable to decay. Scarce.
49	Jauzo (P.)	1	8	1	4	Like rogini (see No. 42 supra), but not such good eating. Scarce.
50	Masúdi (P.)	1	8	1	4	Colour yellow. Size like rogini (see No. 42 supra). Scarce.
51	Rago	0	36	0	12	Do. do.
52	Angúro	I	8	ı	4	Colour yellow. Size like ichko (see No. 35 supra). Taste, etc., like rogini. Scarce.
53	Nasúa or Nasúha (P.)	ı	8	1	4	Colour red, size like rogini (see No. 42 supra). Scarce.
·54	Wash Kung.	0	36	I	0	Is of two kinds: zard (yellow) and sohr (red). Zard is like dishtari (see No. 41 supra), and sohr is like dandari (see No. 12 supra). Scarce.
55	Gonzali (P.)	I	8	I	0	Fruit dark, round and about the size of a small marble, very small and short. Very numerous. Circumference 3" and length 1\frac{1}{2}".

No.	Name of Date.	Estimate age yield fruit per	of ripe	Estim valu aver: yield tre	e of age per	Remarks.
		Mds. Comm Ordin	on or nary	Rs.	а.	
56	Bor	I	8	1	4	Colour chestnut, size like gonzali (see No. 55 supra). Scarce.
57	Kaléri (P.)	0	24	0	8	Like gonsali (see No. 55 supra), in shape, but smaller. When ripening, it is crimson; when ripe, it is dark-red. A few trees in each village.
58	Umbi	0	36	I	0	Colour red. Size like kaléri (see No. 57 supra). Scarce.
59	Kungo or Kungun(P.)	I	8	I	6	When ripening, it is crimson; when ripe, black. Rather smaller than dandari (see No. 12 supra) with a thinner stone. Is not easily injured by rain. Is tasteful in winter and better than gonsali (see No. 55 supra). A few trees in each village.
60	Jálagi mulki	. 1	20	ı	8	Colour yellow. Fruit like kungo (see No. 59 supra) in size.
61	Jálagi koh (P.)	i	8	0	12	An inferior date. When ripening is yellow, but when ripe is very dark. Date in size like kungo (see No. 59 supra). Scarce.
62	Jálagi Rustá (P.)	i r	8	0	12	Fruit yellow and like kungo (see No. 59 supra) in size. Not easily injured by rain. Scarce.
63	Husséni (P.) 0	36	I		Poor eating. Colour yellow. Equal in length to kungo (see No. 59 supra), but thinner. Little injured by rain. The tree is imposing and straight, and is much used for beams and rafters. Scarce.
64	Charpán	. 0	24	0	8	Colour of fruit red. Like gonsali (see No. 55 supra), but better in taste. Scarce.

No.	Name of Date.	Estimated average yield of ripe fruit per tree.		Estimated value of average yield per tree.		Remarks.	
	•	Mds. Comm Ordi Qua	on or nary	Rs.	a.		
65	Mákili (P.)	0	36	0	12	Very scarce and resembles husséni (see No. 63 supra).	
66	Jowáná (Siáh-karz) (P.)	I	8	1	o	Very like gonzali (see No. 55 supra). Gonzali, however, has no saccharine juice while jowána has a great deal.	
· 67	Sadrami (P.)	0	36	I	O	Colour yellow, size like jowana (siah-karz) (see No. 66 supra). Scarce.	
68	Shorai	1	8	1	4	Colour brown do.	
69	Kaléruk (P.)	ī	8	I	o	Fruit, when ripening, is red; but when ripe, is dark. Shape and size like gonzali (see No. 55 supra). Scarce.	
70	Kalér (P.)	1	8	1	o	Do. do.	
71	Kukri	I	8	I	0	Colour red. Size like kaléruk (see No. 69 supra). Scarce.	
72	Boál (P.)	1	· 8	1	4	Colour yellow. In size, etc., like gonzali (see No. 55 supra). Scarce.	
73	Karpáso	1	8	1	o	Colour yellow. Size like gonsali (see No. 55 supra). A tasteless date. Scarce.	
74	Mahtáp Táza.	I	o	0	12	Colour yellow. Date round like gonzali (see No. 55 supra). A single tree in Kaush-Kalát. Name modern.	
75	Konaro	0	36	1	o	Colour yellow. Size like gonzali (see No. 55 supra). Scarce.	
76	Pésh-ná (P.) (First of all.)	I	8	1	4	Colour yellow, but when ripening red. Is called pesh-na because it ripens before all other dates. Is numerous. Size: circumference 2½" and length 1½".	

No.	Name of Date.	Estimated average yield of ripe fruit per tree.		Remarks.
		Mds. Srs. Common or Ordinary Quality.	Rs. a.	
77	Wash-ná (P.)	, ~	1 0	Colour, size, etc., like pésh-ná (see No. 76 supra). Scarce.
78	Pull	т 8	1 0	Like pésh-ná (see No. 76 supra) and ripens as early. Scarce.
7 9	Challo	r · 8	1 4	Colour yellow. Size like pésh-ná (see No. 76 supra). Scarce.
80	Dár-ná (Wood date).	r 8	1 0	Very like pėsh-ná (see No. 76 supra). The date will not break when it falls to the ground, is hence called dár-ná, i.e., strong as wood. Scarce.
81	Posto (P.)	o 36	0 12	Colour yellow. Size like pesh-ná (see No. 76 supra). Poor eating. Scarce.
82	Gogná (Cow date). (P.)	1 32	2 0	Very numerous. The largest and thickest of all dates with the exception of kala-dissaki (see No. 83 below). Its name denotes its size; as big as a cow. Circumference at the thickest point 33" and length about 13". One date is said to be more than a mouthful.
83	Kala Diz- zaki (P.)	0 24	0 12	Very scarce. Colour red. Size larger than gogná (see No. 82 supra) but not good eating.
84	Ari	1 8	1 0	Colour yellow. Size like gogná (see No. 82 supra). Scarce.
85	Sunt gurág (P.)(Crow's bill.)	1 8	I 4	Crimson when ripening but brown when ripe. In size, etc., like arrisht. Named after its similarity to a crow's bill. Scarce.

						<u> </u>
No.	Name of Date.	Estimat age yiel fruit p	ed aver- d of ripe er tree.	Estin value avera yield tre	of age per	Remarks.
		Mds. Comm Ordi Qua	on or nary	Rs.	a.	
86	Kuroch	~ī	8	I	4	A kuroch is a tree of natural growth. Is of three kinds, viz., sard (yellow), sohr (red), and shúnsh. The first two are like pésh-ná (see No. 76 supra) in size, but shúnsh (see No. 101 below) is like a small pellet, both in shape and size. Shúnsh fruit is both red and yellow. Not
87	Barni (P.)	O	24	o	12	very common. Colour chestnut and size like dandári (see No. 12 supra). The fruit is liable to decay. Very juicy. Scarce.
88	Báz-khudá bun.	o	36	I	0	Colour yellow. Size like shehri (see No. 18 supra). Scarce.
89	Sohr-dána	1	8	I	0	Colour red; in size like bėgam- jangi (see No. 2 supra). Found in Sami but not in Turbat.
90	Músali (P.)	0	24	o	12	Colour red. Size like múzáti (see No. 7 supra). Never damaged by rain. Only one very old tree is to be found in Shahrak. Possibly its origin was Músal
91	Sibil		24	o	12	in Syria. Colour yellow. In size like shepago (see No. 34 supra). Only one tree in Shahrak.
92	Parramo	Ì	8	0	12	Colour red. Size like ichko (see No. 35 supra). Scarce.
93	Kalig Dirr	o	32	I	0	Only found in Kulanch. A kuroch tree.
94	Kulonti	1	o	0	12	Colour yellow. One tree here and there in Kaush-Kalat.
95	Wakhshi	0	32	0	12) Name new.
96	Wash Ku- lont.	o	36	r	0	Colour yellowish white. Size like jowána-bú-shams (see No. 23 supra). Better eating when ripening than when ripe. Scarce.

No.	Name of	Date.	age yiel	ed aver- d of ripe er tree.	aver yield	e of	Remarks.		
			Mds. Comm Ordi	on or	Rs.	а.			
97	Gund bag.	Gur-	ĩ	8	I	4	Colour yellow. Size like sard-é- kallagi (see No. 8 supra). Scarce.		
98	Rogini kano.		0	36	0	12	Colour yellow. Size like gvári (see No. 24 supra). Poor eating. Scarce.		
99	Puppo	•••	O	36	0	12	Colour yellow. Size like sakano (see No. 98 supra). The Panjgúr puppo is bigger and gives more fruit. Scarce.		
100	Asami	•••	o Lowest	24 Quals	ty.	8	Colour yellow. Size like jowána- bú-shams (see No. 23 supra). Only three tree in Júsak.		
101	Shúnsh	••	1	8		8	The colour of one kind is yellow and of the other red. A very small date. Also called jūnj. Is compared by the people to a slave who eats and does not work. Is little more than skin and stone and is generally given to cattle. "Eat one seer of shūnsh and there will be one and a half seers of stones" is the saying.		
102	Pách k i	•••	1 Bule	o éda.	0	8	Colour dark when ripe. Size like gonzali (see No. 55 supra).		
103	Zard-é-r	aís.	O	36	0	12	Yellow colour. Size that of pėsh- ná (see No 76 supra). It is peculiar to Buléda, though found in Kéch and Panjgúr also in very small numbers.		
TH	THE FOLLOWING DATES ARE PECULIAR TO PANJGUR.								
104	Kahrub	á (P.)	I	8	1	0	Length 1", circumference 2½." Colour yellow, size like bégam jangi (see No. 2 supra). The sap is extracted from it and put into humbs for preserving músáti (see No. 7 supra) dates. Also eaten fresh in large quantities and preserved as dánagi and largely consumed in Las Bela and Jhalawan.		

No.	Name of	Date.	Estimate age yield fruit pe	of ripe	Estim value avera yield tree	of ige per	Remarks,
			Mds.	Srs.	Rs.	a.	
106	Sohr Ki Siáh Zard	uroch	} x	20	I	0	These are kuroch trees as their name signifies. Red, black and yellow in colour. Though kuroch, they are famous for the quality of their fruit. Sohr kuroch, length 1½" and circumference 2¾". Zard kuroch, length 1½' and circumference 2¾". The size and shape fo sidh kuroch resemble that of sard kuroch. All these kuroch are largely preserved either by themselves or mixed with kahrubá (see No. 103 supra) and are largely passed off on the people of Las Béla as kahrubá and sold at kahrubá rates.
108	Lango	•••	1	20	I	o	Size like that of sard kuroch (see No. 106 supra) and no better in quality. Is preserved and mixed with kuroch and also with kahrubá (see No. 103 supra). Is somewhat scarce.
109	Hushkí	ch					This is peculiar to Dizzak and is brought to Panjgur to be preserved.

Note.—The most numerous trees in Panjgur in order of importance are :-

I.	Kahrubá.	7	
2.	Muzáti.		
3.	Sabzo.	}	Pedigree trees.
4.	Dandári.	1	
	Rabai.	j	
5. 6.	Kalút.		
7.	Zard Kuroch.	1	Kuroch.
8.	Sohr Kuroch.	ſ	Kuroen.

APPENDIX VI.

List of implements of husbandry used in Makrán.

No.	Name in Baluchi.			Description.	
1	Arin	***	•••	Plank harrow with an iron edge. See kén, No. 19 below.	
2	Arra (Panj	jgúr)		A sickle. See dás, No. 5 below.	
3	Bard	***		Triangular iron spade.	
4	Dahmard	***	•••	Wooden wedge at the end of the plough shaft.	
5	Dás	***	- 1	A sickle. See arra, No. 2 supra.	
6	Dosháha	•••		A two-pronged wooden fork used for winnowing, etc. See sanga, No. 39 below.	
7	Gwálag	•••		Goat hair sack for carrying fodder and grain.	
8	Hanshon	(Dasht)		Wooden spade used for winnowing. See kaság, No. 18 below.	
9	Hosham	•••	•••	the yoke.	
10	Humb	•••	•••	Earthen pot used for preserving dates.	
11	Jugh	•••		A yoke.	
12	Kach	•••	•••	and carriage of manure.	
13	Kail (Kol	wa)	•••	Wooden measure for grain.	
14	Kalamgo	r (Kéch)		Implement with iron prongs for mak ing small embankments. See korús No. 21 below.	
15	Kamér	•••			
10	Kapát	•••	•••	Dwarf palm basket for gathering dates	
	Kapátag	•••	•••		
17 18	Kaság			hanshon, No. 8 supra.	
19	Kén (Kol	wa)	•••	A plank harrow with iron edge. Se arin, No. 1 supra.	
20	Kodál	***			
21	Koráz (Pa	anjgúr)	•••	Iron pronged implement for making embankments. See kalamgor, No. 1 supra.	

No.	No. Name in Baluchi.			Description.		
22	Lachuk	•••	•••	Ornamental dwarf palm hand basket with cover for ripe dates.		
23	Langár			Plough.		
24	Málag (Ko	olwa)	•••	Wooden log used as clod crusher See mars, No. 26 below.		
25	Mard (Kula	ánch).	•.	Plough handle. See musht, No. 29 below.		
26	Marz		•••	A wooden log used as clod crusher. See málag, No. 24 supra.		
27	Métin (Kéc	h)		Iron bar with broad point.		
28	Múbang (P	-		Ditto.		
29	Musht	•••	•••	Plough handle. See mard, No. 25 supra.		
30	Pát (Kéch)	•••	•••	Large dwarf palm sack for storing grain.		
31	Pát	•••	•••	Small dwarf palm bag for storing lag- hati dates.		
32	Panchán (I	Dasht)	•••	Five-pronged wooden winnowing fork.		
33	Panch-sháh	na	•••	Ditto.		
34	Parbun (Panjgúr))	Climbing belt for gathering dates. See tor, No. 43 below.		
35	Rambi	***	•••	A weeding spud.		
36	Sanga (Da Kulánch)	asht a	and	Two-pronged wooden fork. See do- shaha, No. 6 supra.		
37	Sabt or Sa	pt	•••	Dwarf palm basket used for cleaning káréses and other agricultural purposes.		
38	Shat		•••	Ox goad.		
39	Shér	•••	•••	Rope fastening the plough shaft to the yoke.		
40	Shitting			Plough shaft.		
41	Sund	•••	•••	Dwarf palm bag used for enclosing date bunches on the tree.		
42	Taffar	•••	•••	Hatchet.		
43	Tor	•••	••.	Climbing belt for gathering dates. See parbun, No. 34 above.		

Note.—Names of implements which are not common to all parts of Makran are supplemented with the name of the locality, in brackets, in which they are particularly used.

APPENDIX VII.

Trees, bushes and grasses found in Makran.

TREES.

Chish (Acacia). Gazz (Tamarisk) Tamarix gallica). Kahúr (Prosopis spicigera). Shirish (Melia asadirachta). Karag (Ficus bengalensis). Patk (Poplar) Populus euphratica). Kalér (Capparis aphylla). Date tree (Phænix dactylifera). Jak (Dalbergia sissoo). Hat (Olive) (Olea cuspidata). Gwan (Pistacia cabulica). mutica). Kasúr(Béd (Willow) (Salix acmophylla).

BUSHES.

Chigird.
Zírruk.
Pír or Kabbar (Salvadora oleoides).
Gwanik (Vitex trifoliata).
Kark (Calotropis gigantea).
Kunar (Zisyphus jujuba).
Jugr.
Eshark.
Gishtir.

GRASSES. Gandil or Granachin (Eleusine

flagellifera). Gomaz (Allium sphærocephalum).Shimsh. Sibr Indarkáh (Trianthema pentan-Kásh (Saccharum spontaneum). Díl (Andropogon). Drug or Drab (Eragrostis cynosuroides). Barshonk. Putronk. Pútár. Sundum (*Epilasia ammaphila*). Maghér (Rumex vesicarius). Makankúr. Nadag. Kándár or Baun. Gorkáh (Ischæmum angustifolium).

PLANTS.

Hanshag.
Rigit (Suæda monoiea).
Kalmúrag.
Sorichk.
Doliko.
Mésk.
Písh (Dwarf palm) (Nannorhops Ritchieana).
Shurdo.
Kál.
Landin.
Traht.
Kohalo.
Lánto.
Kunchito.

APPENDIX VIII.

PRINCIPAL ROUTES.

KÉCH VALLEY ROUTE.

No. 1.—Béla to Mand.

No.	84	Appro Dista		Remarks.	
No.	Stage.	Interme- diate.		REMARKS.	
1	Kumb-é-Shírín .	16 1		Road crosses the Jau Lak (1,300 feet) by a steep and narrow track.	
2	Már River	10	26 <u>‡</u>	Camp on west bank.	
3	Arra River, Bul- bási valley	12	38 <u>‡</u>	Road crosses Sítáro defile (1,250 feet).	
4	Kurragi, Jau	20	58½	A pass is crossed into the Jau valley. From this point, an alternative and shorter route goes to Tank at the western end of the Kolwa valley via Gushánag, for stages on which see general description.	
5	Nondaro	19	77½	Cross the Sér pass into the Non- daro valley. From Nondaro a track runs northward to Pelár, Nál and also to Jébri.	
6	Awárán	13±	91	Over the Barída pass the ascent of which is difficult but the descent easy. From this point travellers can keep either to the north or south of the Kolwa valley. The route on the south was followed by the Political Agent, Kalát, and a mixed force of cavalry, artillery and infantry in 1901 via Mand-ai-Parrag (c. 20), not far from Gushánag,	

	Stage.		ximate inces.	Remarks.
No.	Stage.	Interme- diate.	Total.	REMAKES.
	Awárán—contd.			Jalambi near Chambur (c. 19), Parrag (c. 12), Balor (c. 15), Gumbud (c. 13), and Tank (c. 11), where the track joins the present route. In the case of an ordinary caravan the present route could, however, be shortened by going from Gumbud to Osháp and thence to Sohrábi-Bént and Sámi, so avoiding the détour to Tank and saving one day. Routes lead from Awárán (a) to Panjgúr and Khárán via the Doráski, and (b) to Mashkai via Manguli Kalát.
7	Lower Málár	22	113	This stage can be shortened by halting at Bazdád (c. 15 miles).
8	Hor Kalát	22	135	Side route over Mádag Pass to join Turbat-Panjgúr route via Bálgattar.
9	Rodkán	23	158	This stage can be shortened by halting at Madag-e-Kalat.
10	Tank	18	176	The stage can be shortened by halting at Jérrak-é-dap. Tank is not shown on the maps but is the point where the Kil Kaur debouches into the Kéch valley.
	Rahgíwárán	13	189	An important halting stage on the Pasni-Panjgúr route via Pídárk, Tal-é-sar and Bálgattar, and on the Turbat-Panjgúr route via Bálgattar.
12	Sohráb-i-Bént	II	200	An alternative halting place is Tijábán (c. 8) miles). An alternative route from Rodkán to this place is via Gumbud and Osháp, the distances being much the same.

No.	Stage.		Approximate Distances.		Rrmarks.
			Interme- diate.	Total.	NEMARAS
i				-	
13	Sámi	•••	16	216	Track to Bit in Buléda via the Gish Kaur.
14	Turbat	•••	22	238	For side routes see Pasni-Panjgur route (No. 5, stage 5) and Dasht Valley route (No. 8).
15	Násirábád	•••	25	263	An intermediate camping place is Kalátuk, 10 miles.
16	Báli Cháh	•••	14	277	Matatuk, 10 mmes.
17	Tump	•••	9	286	
18	Dokop	, 	10	296	Track very stony and narrow in places.
19	Gayáb		.12	308	Head quarters of the Makran Rinds.

The most difficult part of this route, which is said to have been used for centuries by pilgrims and merchants travelling between India and the countries west of the head of the Persian Gulf, is the eastern part, between Béla and Awaran, where several difficult passes have to be crossed. After heavy rain, the track over the Jau Lak is passable by laden animals only with considerable difficulty. West of Awaran, the Kolwa and Kech valleys are followed and the going is easy. Fuel, water and camel grazing are everywhere procurable, but supplies are not easily obtainable until Turbat is reached. A shop at which native supplies are obtainable in small quantities, is to be found at Kurragi. Some of the stages are long but there are many intermediate halting places. Water is obtainable from streams, pools in rivers, and káréses, except at Lower Málár and Rodkán where it is got from wells.

To avoid the long détour to the north via Awaran, a

shorter route can be taken from Kurragi in Jau, proceeding via Ziarat or Masjid (c. 11½ miles), Pau river (c. 14), Garmáp (c. 7½), Gushánag (c. 12), Chambur (c. 15), Balor (c. 13), Gumbud (c. 13), Osháp (c. 18), and Sohráb-i-Bént (c. 15), where it rejoins the present route.

No. 2.—KALÁT—PANJGÚR ROUTE.

From Zayak via the Rághai Valley to Isai.

The first part of this route from Kalat to Zayak will be found in the Gazetteer of Ihalawan. The stages are—

		Miles.	1			Miles.
Rođénjo	***	Miles. <i>c</i> . 16 <i>c</i> . 16	Wajo	•••	. •	
Gandagén	•••	<i>c</i> . 16	Zayak	•••	•••	<i>c</i> . 16
Súrab	***	C. I2	1			
Gidar	•••		l		Total	89
	1		1			

No.		Approx Distar	imate ices.	
	Stage.	Intermedi- ate.	Total.	Remarks.
1	Zayak to Dhúléri	16	16	Over the easy Kambran pass.
2	Shingri	17	33	
3	Singén-Kalát	. 8	41	From Singén-Kalát a footpath goes to Jebri via the Náli pass, and a caraván route to Nál via the Purki pass.
4	Saráp	16	57	
5	Sáka Kalát	22	79	For remainder of route see stages 4 to 8 Kachhi-Makrán route (No. 4)Gwarjak to Isái, Panjgúr.

DESCRIPTION.

The total distance from Kalát is 168 miles. This road runs through the Rághai valley and is easy throughout, water, wood, camel grazing and grass being plentiful. No supplies are available anywhere, but a small quantity could

be arranged for at Dhúléri from Shíréza. All the stages to Saráp are in country which is under the Khárán Chief. For an alternative route via the Rakhshán valley see Route No. 3. This route is preferable to No. 3, owing to the better water supply and less exposed character of the country in winter.

No. 3.-KALAT-PANJGÚR ROUTE.

Alternative route from Zayak via the Rakhshan valley. The route to Zayak is detailed in the Gasetteer of Jhalawan; the stages are:—

_		Miles.	l		Mil	les.
Rodénjo	•••	<i>c</i> . 16	Wajo		c.	I 2
Gandagén	•••	c. 16	Zayak	•••	c.	16
Súráb	•••	c. 12			-	
Gidar	•••	c. 17	ł	Total		89

		Approximat	e Distances	
No.	Stage.	Inter- mediate.	Total.	Remarks.
1	Zayak to Shíréza	20	20	The track first leads to Patk over the easy Kambrán pass and thence branches to Shíréza, 4 miles, or the stage can be shortened by halting at Patk. The alternative route via Rághai (supra) takes over at Dhúléri. There is a track from Shíréza to Jébri via the Dhúléri river and another to Khárán via Zard pass.
2	Nok Cháh	. 14	34	
3	Gwaragi	11	45	From here a track leads to Wáshuk via the Páliáz pass.
4	Nág-ai-Kalát	21	66	Levy post and small garrison of Kharan levies.
5	Miyyal Chah	. 10	76	The more direct route to Nigindáp is via Ahmad Khán-é-Band (Kúcha Damb) if water is avail- able there.

No.	Stage.	Approximate Distances.		
	Juage.	Interme- diate.	Total.	REMARKS.
6	Nigindáp	23	99	
7	Kénagi Cháh	18	117	
8	Sháh Sowar	12	129	•
9	Isái (Panjgúr)	16	145	

This is an alternative route to that via the Rághai valley. It is a few miles shorter and, so far as the going is concerned, is easier than that via Rághai. The water supply, however, though sufficient, is from deep wells and, therefore, not so good or abundant as on the Rághai route nor is fuel so plentiful. A little grass and camel grazing are obtainable. The valley, being less wooded and more exposed, is much colder in winter than the route via Rághai. The stages up to the vicinity of Sháh Sowar Cháh lie in the jurisdiction of the Khárán Chief but the exact boundary between the Khán's jurisdiction and Khárán has not been defined. Supplies are only procurable at Isái and Panjgúr.

No. 4.—Kachhi-Makran Route via Mashkai.

Gwarjak to Isai, Panjgur.

The stages from Kotra to Gwarjak are detailed in the Jhalawan

Gasetteer.

No.	Stage.	Approximate Distance		
		Inter- mediate.	Total.	REMARKS.
1	Gwarjak to Tank East.	13	13	Halting place below hill, elevation 2,915 feet on map, and west of Katli Gwarm, a pool much fre-
2	Pasht Koh	10 .	23	quented for fishing. Track very stony, in bed of stream; trying for baggage animals.

		Approximat	te Distances	:
No.	Stage.	Interme- diate.	Total.	Remarks.
. 3	Kahn or Sáka Kalát.	18	41	Junction with Kalát-Panjgúr route via Rághai, see Route No. 2.
4	Sarap	12	53	In the bed of the Lori Kaur.
5	Sargwaz	14	67	Darhanár, to about 5 miles west of this place, is a halting place on the Béla-Panjgúr route, No. 9.
6	Eastern side of Garr Pass.	11	78	Water, wood and grass are scanty here. It is better to go over the pass, 2 miles further on, where water is obtainable.
7	Zayak	. 14	92	Over the Garr pass. Steep and narrow but not difficult.
8	Isái, Panjgúr	18	110	Stage can be shortened by halting at Pír Umar, 8 miles.

This is a well known caravan route leading west from the Mashkai valley to the Rakhshán valley and is a continuation of the route from Kachhi which is ordinarily followed by parties going overland to Makrán in winter owing to the great cold of the Kalát-Panjgúr route. It makes a somewhat long détour to the north via Sáka Kalát, but this is unavoidable owing to the water supply which is the principal difficulty throughout the route. A small party carrying everything except water could avoid this détour by going from Pasht Koh direct to Saráp where water is obtainable from the river bed, leaving Sáka Kalát about 5 miles to the north.

In seasons of good rainfall, and if water is procurable at 1. Bizhbani Chah, 10 miles beyond Sarap, 22 miles. Darhanár 2. Darhanár ... II miles. the alter-3. Mita Sing ... 12 miles. native 4. Isái, Panjgúr ... 19 miles. ••• route, shown in the margin could be taken from Sáka Kalát. Water is good and abundant from wells at the first stage; limited and dependent on rainfall at the second, and plentiful at the third. No supplies are procurable on either route but forage and wood are abundant.

No. 5. - Pasni-Panjgúr Route. Pasni to Panjgúr via Turbat.

	Stage.	Approximat	eDistances.	
No.		Inter- mediate.	Total.	Remarks.
1	Pasni to Kabbari	15	15	At Gazdár 9 miles, a track branch- es to Kalmat.
2	Gulámáni Bént	9	24	At the junction of the Gáruki Kaur with the Shádi Kaur a road branches off up the bed of the former to Panjgúr via Bálgat- tar.
3	Soráp	17	41	•
4	Basol Kán	16	57	Pídárk, where supplies are obtain- able, is 4 miles east of the halting place. A track goes from Basol Kán via Jamak and Gwarkop and Tal-é-sar to Panjgúr through Bálgattar.
5	Turbat	16	73	Three miles north of Basol Kán, the mouth of the Gokprosh defile is entered. Turbat is the junction of the Kéch valley and Pasni-Panjgúr routes. It is also connected with Gwádar by a track crossing the Talár pass, and with Jíwnri by the Dasht valley route, No. 8. An alternative route onward to Panjgúr goes from Turbat via Rahgíwárán, Bálgattar and Sháhbánz.
6	Jadgál	11	84	, <u></u>

	. '	Approximat	e Distances	
No.	Stage.	Interme- diate.	Total.	Remarks.
7	Chib	24	108	The path crosses the Garruk pass. From Chib there is (a) a track to Sámi via the Gish Kaur; (b) a track to Mand via Wakái and Aspikahn; (c) a track to Siáh Gísi via Gwánzagán; and (d) a track to Géshtagan, in Persian territory via Ushtarkand.
8	Shétáp	12	120	kand.
9	Mír-é-Takht	11	131	
10	Turk-é-Ambár	9	140	The name Hapt-Kandag which is given to this part of the route is derived from the seven small passes between Mír-é-Takht and Turk-é-Ambár.
11	Isáiáb	15	15	and I alk o impai,
12	Narián-é-Kand (Kohbun)	21	176	
13	Isái (Panjgúr)	16	192	Routes from Khárán on the north, from Kalát on the east and from Béla on the south- east converge on Isái, Panjgúr.

The only bridle-path in Makran, and the best and shortest route to Panjgur. In 1904 and 1905 Rs. 5,000 were spent in improving the track and rendering it easy and fit for camel transport. Some of the stages are long, but sites for intermediate camps can easily be selected if required. Water, wood, and camel grazing are obtainable at all the halting places in sufficient quantities for ordinary parties. Supplies are only procurable at Pasni, Turbat and Isai in Panjgur, though sufficient for small parties could be arranged for locally beforehand at Pidárk and at the various halting places in the Kéch and Buléda valleys. The alternative route from Turbat to Panjgur via Bálgattar is given as route No. 6. A track connecting the road from Pasni with it runs from Pidárk to Rahgiwárán via Jamak, Gwarkop and Tal-é-sar.

No. 6.—Turbat-Panjgúr Route via Bálgattar.

		Approximat	e Distances.		
No.	Stage.	Inter- mediate.	Total.	REMARKS.	
	Turbat to Shah-	17	17	Kark-é-ábdár (7 miles) could be made an intermediate stage.	
2	Irrok	16	33	Sámi village is passed at 5 miles whence a route runs via the Gish Kaur to Buléda.	
	Rahgíwárán	16	49	From this point the Kéch valley route, which has been followed hitherto, is left. The route is here joined by the track from Pasni via Pídárk and Tal-é-sar. Alternative stages from Turbat to Rahgíwárán are Sámi (22 miles), Tijábán (19 miles), and Rahgíwárán (8 miles).	
4	Mazári well, Bál- gattar	12	61	The Kátag-é-Kandag is crossed between Rahgíwárán and Bál- gattar. The Ragári well is on the west of the valley.	
5	Pugul Kahn	14	71	Across the Bálgattar kap which would be impassable in wet weather. Good water in the bed of the stream.	
6	Lashkarán Kaur	II	86	Lashkarán Kaur, or the stream of the armies, as the name signifies, was the scene of a defeat inflicted by Mohím Khán, the famous Makrán Naushérwáni, on a party of the Chágai Bráhuis. Numerous memorial heaps mark the site of the engagement.	
7	Jauri Kaur	11	97	The Gorán-é-Kandag has to be crossed.	
8	Dasht-é-Sháh- bánz	9-	106		
9	Isái, Panjgúr	18	124	Across the Kasháni pass.	

This route avoids the Garruk pass and the Hapt Kandag, but is likely to be less used now that a bridle-path has been constructed from Turbat to Panjgur over these passes. It forms the northern part of the direct route from Pasni to Panjgur via Pídárk. It is fit for laden camels and other pack transport. Water, fuel, grass and camel grazing at all stages. Supplies can be collected with due notice at Shahrak, Irrok and Dasht-é-Sháhbánz.

No. 7.—GWADAR-TURBAT ROUTE.

Gwadar to Turbat via the Talar pass.

No.	Stage.	Approximate Distances.		
		Inter- mediate:	Total.	Remarks.
1	Shanikkáni Dari in Gwádar-i Nigwar.		10	From Gwádar a track leads to the Dasht river route at Gabd c. 39 miles, the intermediate halting places being Ankárau c. 16 miles, and Píshal c. 11 miles. Routes also lead from Shanikkáni Darr to Pasni along the telegraph line and to Nokbur via Kappar and Tank-é-Sawar.
2	Kappar	20	30	
3	Talár Pass	22	52	Camping ground is at entrance to pass.
4	Kasar	. 17	69	First two miles through Talar pass which is somewhat difficult and would be impassable for camels after heavy rain. The Asmangul pass is entered at 4 miles. After crossing the Asmangul a track diverges to Tump from Biri via Kunchti Khurd and Pittok.
5	Káni	. 12	81	
6	Turbat	. 19	100	Over the Gokprosh hills.

Water, generally from wells, at each stage, but, like fuel Miles. and forage, it is not plentiful Barambáb ... C. 14 though it is generally sufficient for Nalént C. 14 an ordinary party. The second, Chibwari... ... C. 11 third, and fourth stages are long, Bíri c. 13 but they could be shortened by Káni ... c. 19 dividing the march between Shanikkáni Darr and Káni into five stages and halting at the places noted in the margin. The supply of water, however, is uncertain and brackish both at Barambáb and from the deep well at Nalént. No supplies are available on either route. Wood and camel forage are both scarce.

No. 8.—Dasht Valley Route.

No. 1/wnri to Turbat.

No.	Stage.	Approximate Distances.		
		Inter- mediate.	Total.	Remarks.
1	Jíwnri to Chátáni Bal.	14	14	Water-supply limited and quality indifferent.
2	Gabd	15	29	On Indo-European telegraph line. Side route to Gwadár (c. 39 miles).
3	Daméli	11	40	
4	Mitténg	10	50	
5	Zarrénbug	12	62	
6	Tolagi Mehtag	17	79	Bishuli, a larger village, is about 2½ miles to the north, on the other side of the river. This long stage could be shortened by halting at Langási.
7	Kohak	11	90	· .
8	Ammaláni	14	104	There is an alternative route to
9	Káni	. 7	111	Turbat via Kuntdár, 42 miles.
10	Turbat	19	130	

A well known caravan route running alongside the Dasht river. The track is level and easy for pack transport, the only difficulties being caused by the windings of the river which has to be crossed frequently. Supplies can be arranged for without difficulty as there is ample cultivation along the river. Caravan routes from Gwadar to Baho Kalat cross the route at Gabd and Sunt Sar. Mand can be reached by a track known as Sargwap, starting from Sunt Sar and traversing the western portion of Nigwar. Water is good and abundant at all places near the Dasht river and forage and fuel are plentiful. Between Jiwnri and Gabd, however, neither forage nor fuel is obtainable and the water at Chatani Bal is scanty and brackish. The nearest perennial water to Ammalani is 4 miles away in the Dasht river and the supply at Kani is scarce.

No. 9.—Panjgúr-Béla Route via the Doráski.

For stages from Béla to Awárán, see Kéch Valley Route, No. 1.

No.	Stage.	Approximate Distances.		·
		Inter- mediate.	Total.	Remarks.
1	Awárán to Pasa- hél Kaur.	18	18	The Doráski stream is entered about half way to Siáhén Dát.
2	Siáhén Dát	181	36∤	
3	Kurchara	. 15	511	
4	Darhanár	17	68 <u>1</u>	
5	Mita Sing	12	8o ‡	
6	Isái, Panjgúr	19	9)	
]			· ·

This route was followed by Mr. Crawford, Political				
Patk c 7 Lindki Kahúr c 10 Buz Písh c 10 Miles. Agent, Southern Baluchistán, in 1889. He describes it as fit for camels throughout but difficult in				
Thatagári e 10 places. Water and coarse grass				
Jud or Kund c to are to be had at all stages, and Purki c to fuel is generally procurable from				
Darhanár c 10 Zayak c 10 the hill-sides. No supplies are				
Pir Omar e 10 obtainable at any of the inter-				
Isái c 12 mediate halting stages. Country caravans using this route generally adopt the shorter				
stages shown in the margin.				

APPENDIX IX.

List of recipients of allowances in Makrán, 1903.

No.	Name.	Amount per mensem	Remarks.
		Rs.	
ĭ	Mír Méhráb Khán, Gichki.	200	Half brother of the Sardár of Kéch. Rs. 100 are personal allowance and Rs. 100 for the maintenance of five levy sowars. Also draws annually Rs. 2,260 from the telegraph subsidy.
2	Mír Rustom Khán, Gichkl.	90	Brother of Mír Méhráb Khán. Rs. 50 p.m. personal allowance and remainder for the mainten- ance of two levy sowars.
3	Khán Bahádur Mír Muhammad Hasan Khán, Sámi.	413	For good services rendered in the disturbances of 1898.

APPENDIX IX .- contd.

No.	Name-	Amount per mensem.	Remarks.
		Rs.	
4	Mír Sháh Nawáz Khán, Naushér- wáni.	90	The senior headman of the Naushérwánis of Kéch niábat. Personal allowance Rs. 50; the rest for two sowars.
5	Mír Sarfaráz Khán, Naushérwáni.	50	A man of influence among the Naushérwánis.
6	Mír Ashraf, Rind	50	The headman of the Rinds, and responsible for recovering the dah-yak from the Rinds of Dasht.
7	Mír Dín Muhammad, Dagáráni Rind, of Aspikahn.	30	
· 8	Mír Yár Muhammad Bampushti of Gésh- tagán.	20	
9	Malik Mirza (Zámu- rán).	20	These men are responsible for preventing the escape of thieves to the wild country round Zámurán.
10	Mír Yalli (Zámurán).	10	Found Zamuran.
11	Maulvi Ahmad, Qázi of Kéch.	10	All cases for decision by sharian are referred to him; also receives Rs. 10 p.m. from the Gichkis.
12	Qázi Fazl Ahmad of Panjgúr.	5	Also receives Rs. 5 from the Gichkis.
13	Qázi Abdulla of Tump.	10	
	[l	